

7t's All About $A(P)$ ttitude!

## WORK SHEETS

## Reasoning

This book consists of Worksheets of various reasoning topics.These Worksheets cover most of the reasoning question types.

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## BLOOD RELATIONS

## Directions(Q 1-3): Read the information given below and then answer the questions that follow

There is a family of six persons P, Q, R, S, T and U. Their Professions are Engineer, Doctor, Teacher, Salesman, Manager and Lawyer.
(i) There are two married couples in the family.
(ii) The Manager is the grandfather of $U$, who is an Engineer.
(iii) $R$, the salesman, is married to the lady Teacher.
(iv) Q is the mother of U and T .
(v) The Doctor, S is married to the Manager.

1. How many male members are there in the family?
(a) Two
(b) Three
(c) Four
(d) Data inadequate
(e) None of these.
2. How $P$ is related to $T$ ?
(a) Father
(b) Grandfather
(c) Mother
(e) Wife
3. What is the profession of $P$ ?
(a) Lawyer
(b) Lawyer or Teacher
(c) Manager
(d) None of these
(e) Cannot be determined

## Directions(Q 4-8): Read the information given below and then answer the questions that follow:

Six members of a family A, B, C, D, E and F are Psychologist, Manager, Advocate, Jeweller, Doctor and Engineer but not in the same order.
(i) Doctor is the grandfather of F and he is a Psychologist. (ii) Manager D is married to A .
(iii) C, Who is a Jeweller, is married to Advocate.
(iv) $B$ is the mother of $F$ and $E$.
(v) There are two married couples in the family.
4. What is the profession of $E$ ?
(a) Manager
(b) Psychologist
(c) Engineer
(d) Doctor
(e) None
5. How many male members are there in the family?
(a) Two
(b) Three
(c) Four
(e) None
6. How is A related to $E$ ?
(a) Father
(b) Grandmother
(c) Wife
(d) Grandfather
(e) None
7. What is the profession of $A$ ?
(a) Manager
(b) Engineer
(c) Advocate
(d) Cannot be determined
(e) None of these.
8. Who are the two couples in the family?
(a) AD and CB
(b) AB and CD
(c) AE and DE
(d) AC and BD
(e) None of these.

## Directions(Q 9-13): Read the information given below and then answer the questions that follow

(i) In a family of six persons, there are people from three generations. Each person has separate profession and also they like different colours. sThere are two couples in the family.
(ii) Mohan is a CA and his wife is neither a Doctor nor likes Green colour.
(iii) Engineer likes Red colour and his wife is a Teacher.
(iv) Mohini is mother-in-law of Savita and she likes the orange colour.
(v) Deepak is grandfather of Titu, and Titu, who is a principal, likes the black colour.
(vi) Neeru is the granddaughter of Mohini and she likes blue colour. Neeru's mother likes the White colour.
9. Which of the following is the correct pair of two couples?
(a) Deepak-Mohini and Mohan-Neeru
(b) Mohan-Savita and Titu-Neeru
(c) Mohini-Deepak and Mohan-Savita
(d) Cannot be determined
(e) None of the above
10. Who is an Engineer?
(a) Mohini
(b) Savita
(c) Neeru
(d) Cannot be determined
(e) None of these
11. How many ladies are there in the family?
(a) Two
(b) Three
(c) Four
(d) Cannot be determined
(e) None of these.
12. What is the profession of Savita?
(a) Doctor
(b) Teacher
(c) Engineer
(d) Cannot be determined
(e) None of these.
13. Which colour is liked by CA?
(a) Green
(b) White
(c) Either Green or White
(d) Cannot be determined
(e) None of these.

## Directions(Q 14-16): Read the information given below and then answer the questions that follow

(i) A, B, C, D, E, F and G are seven members of a family.
(ii) There are two Doctors, two teachers, two professors and one Lawyer.
(iii) No lady is either Teacher or Lawyer.
(iv) Teacher's Wife is a professor and Lawyer's wife is also a professor.
(v) $C$ is the daughter-in-law of $F$ and mother of $E$.
(vi) B , a doctor, is son of G , and E , who is not a professor, is the daughter of Lawyer.
(vii) A's husband is a Teacher and $A$ is the mother-in-law of $C$ and grandmother of $B$.
(viii) $F$ is the grandfather of $B$ and $D$.
14. How is D related to $A$ ?
(a) Granddaughter
(b) Son
(c) Grandson
(d) Cannot be determined
(e) None of these.
15. What is $D$ to $C$ ?
(a) Daughter-in-law
(b) son-in-law
(c) Daughter
(d) Cannot be determined
(e) None of these.
16. How many female members are there in the family?
(a) One
(b) Two
(c) Three
(d) Cannot be determined
(e)

None of these.

## Directions(Q 17-20): Read the information given below and then answer the questions that follow

$\mathrm{A}, \mathrm{B}, \mathrm{D}, \mathrm{F}, \mathrm{G}, \mathrm{H}$ and K are seven members of a family. They belong to three generations. There are two married couples belonging to two different generations. D is the son of H and is married to K,F is the grand-daughter of B. G's father is grandfather of A. B's husband is father-in-law of K . H has only one son.
17. How is K related to G ?
(a) sister-in-law
(b) sister
(c) Niece
(d) Data inadequate
(e) None of these.
18. How is $F$ related to $G$ ?
(a) Son
(b) Nephew
(c) Niece
(d) Data inadequate
(e) None of these.
19. How many female members are there among them?
(a) Two
(b) Three
(c) Four
(d) Data inadequate
(e) None of these.
20. How is H related to B ?
(a) Father
(b) Father-in-law (c) Uncle
(d) Data inadequate
(e)None of these.
21.' $P \Delta Q$ ' means that $P$ is brother of $Q, ' P$ \# Q' means that $P$ is the father of $Q, ' P 0 Q$ ' means that $P$ is the Mother of $Q$. which of the following would mean ' $R$ is the son of $M$ '?
(a) $M \Delta R \# S$
(b) M \# S O R
(c) M O R \# S
(d) M \# S \# R
(e) None of these.
22. $X-Z$ means $X$ is the mother of $Z ; X \times Z$ means $X$ is the father of $Z ; X+Z$ means $x$ is the daughter of $Z$. Now if $M-N X T+Q$ then which of the following is not true?
(a)T is N's daughter
(b) N is wife of T
(c) M is mother in law of Q
(d) Q is wife of N
(e) None of these
23. $A+B$ means $A$ is son of $B$
$A-B$ means $A$ is father of $B$
$A * B$ means $A$ is brother of $B$
$A \% B$ means $A$ is mother of $B$
Which of the following means $P$ is granddaughter of $Q$
(a) $Q-M+P$
(b) $P+M * N+Q$
(c) Q \% N * M \% P
(d) $\mathrm{Q}-\mathrm{M}-\mathrm{P} \% \mathrm{~N}$
24. Amitabh sent the following invitation to Rekha, let me invite you for the marriage of "the only son of the great grandfather (paternal) of the daughter of my only son" for whose marriage did he invite?
(a) son
(b)father
(c) brother
(d) his own
25. Neha to Heena "yesterday I met the maternal uncle of the only daughter of the only daughter of my mother". How is Neha related to that person?
(a) brother
(b) sister
(c) none of these
(d) cannot be determined
26. Introducing a person to Ajay, Kangana said, " he is the father of the only daughter of the only sister of the only son of my paternal grandfather". How is kangana related to the person?
(a) sister
(b)Aunt
(c) Niece
(d) none of these
27. Introducing Kareena to a new producer Salman said, "she is the only sister of the son of the only brother of the my paternal grandfather. How is kareena related to salman?
(a) son
(b)Aunt
(c) mother
(d) Niece
28.Salman told Aishwarya "your mother's husband's sister is my aunt" how is Aishwarya related to Salman?
(a) sister
(b)mother
(c) cousine
(d)Can not be determined
29. Pointing to a girl Shahid told Priyanka, "she is the second wife of the son of the father of the only son of my grandfather" how is the girl related to Shahid.
(a) mother
(b)aunt
(c) mother or aunt
(d)Can not be determined
30. Pointing to a woman in photograph, a man said, " the son of her sister's father is the maternal uncle of my son " how is the sister of that woman is related to the son of that man?
(a) mother
(b)aunt
(c) mother or aunt
(d) Cannot be determined
31. Nayana, who is Suresh's daughter,says to Preeti, "your mother Prajakta is the youngest sister of my father, who is third child of Sanket."How is Sanket related to Preeti?
(a) uncle
(b)Father
(c) Grand father
(d) Father-in-law
(e)None of these
32. Mahendra told to Dhoni "The man batting at the crease is the younger of the two brothers of sister of brother of the daughter of my father's wife" how is the man batting related to Mahendra.
(a) son
(e)brother-in-law
(b)brother
(c)cousin
(d) Nephew
33. If Kiran says, "Sharad's, mother is the only daughter of my mother", how is Kiran related to Sharad?
(a)Uncle
(b)Father
(c) Mother
d) Cannot be determined
34. Salman told Katrina "your paternal grandfather's only son's wife is grand daughter of father of the brother of the father of my sister's father. How is Katrina related to Salman?
(a) sister
(b) Aunt
(c) Mother
(d) Cousine

## Circular Table Arrangement -1

1) Arijit, Biplab, Chintan, Debashish, Elangovan, Frederick, Gautam and Himadri are sitting around a circular table. Some information about the order in which they are sitting is available as follows:
$>$ Debashish is sitting opposite to Himadri and to the immediate right of Gautam.
$>$ Elangovan is sitting to the immediate right of Biplab.
$>$ Arijit is sitting opposite Chintan who is not immediately next to Frederick on either side.
2) Who is sitting to the immediate right of Himadri?
a) Arijit
b) Debashish
c) Elangovan
d) Frederick
3) Who is sitting opposite Biplab?
a) Arijit
b) Debashish
c) Frederick
d) Himadri
4) Who is to the immediate right of Chintan?
a) Arijit
b) Biplab
c) Elangovan
d) Himadri
5) There are 6 persons $A, B, C, D, E$ and $F$ sitting around the circular table, with equal distance between them. The three of them are facing centre, while the remaining three face outward. $D$ is second to the right of $A$.
$F$ is second to the left of $B$. $F$ and $E$ are diagonally opposite $C$ is immediate left of $E$, who is facing centre,
$C$ and $D$ are facing in the same direction. $A$ and $E$ are facing in the same direction.
6) Study the following information and answer the questions given below:

Eight friends - A, B, C, D, E, F, G and H - are sitting around a circular table not necessarily in the same order. Three of them are facing outward while five are facing towards the centre. There are equal number of males and females in the group.
$C$ is facing the centre. $F$ is sitting third to the left of $E$. The immediate neighbours of $B$ are females. $G$ is sitting third to the right of $F$. D is sitting third to the right of $A$. Three persons are sitting between $F$ and $B$. $A$ is not an immediate neighbour of $E$. The immediate neighbours of $E$ are males and are facing the centre. The immediate neighbours of $D$ are females and face outside. $E$ is sitting third to the right of $C$. The one sitting third to the left of $B$ is a male. No female is an immediate neighbour of G .

1) Who is sitting second to the right of $E$ ?
(a) C
(b) B
(c) $G$
(d) H
(e)None of these
2) How many persons are sitting between H and C when counted from left side of H ?
(a) One
(b) Two
(c) Three
(d) Four
(e) More than four
3) Which of the following statements is true regarding H ?
(a) The one who is second to the right of H is a female.
(c) H is a male
(e) the immediate neighbours of H are facing outside.
(b) H is facing the centre.
(d) None is true.
4) What is D's position with respect to $G$ ?
a) Third to the left
b) Third to the right
d) Second to the right
e) None of these
5) Read the following information carefully and answer the questions which follow.

Six friends $\mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}, \mathrm{T}$ and V are sitting around a circular table facing either centre or outside.

- $P$ sits third to the left of $R$.
- R faces centre
- $V$ sits second to the left of $P$.
- $Q$ sits second to the right of V .
- T sits immediate to the right of $Q$
- Immediate neighbour of $P$ face the direction opposite to that of $P$.
- T sits second to the left of R.

1) Who among the following sits second to the right of $R$ ?
(a) T
(b) S
(c) V
(d) P
(e) None of these
2) Which of the following is true
(a) four person are facing centre
(b) $R$ and $S$ are neighbours
(c) $V$ is to the immediate right of both $S$ and $R$
(d) $P$ faces outside
(e) There are three persons between $Q$ and $S$
3) Four of the following five are alike in a certain way based upon the given seating arrangement and so from a group. Which is the one that does not belong to thet group?
(a) P
(b) T
(c) S
(d) V
(e) Q
4) Study the following information carefully and answer the given questions.

Eight family members P, Q, R, S, T, V, W and Y are sitting around a circular table. Some of them are facing the centre while some are facing outside.

- $R$, the son of $S$ sits third to right of his sister V . V faces the centre and no male is an immediate neighbour of V .
- $S$ sits second to left of her husband $W$. W is not an immediate neighbour of $R$.
- The father of W sits second to the left of his only daughter-in-law sitting at the table.
- $Y$ the mother of $W$ sits to the immediate left of her husband.
- No one sits between W and his brother P.
- $T$, the daughter of $P$ sits second to the right of her grandmother.
- All the children in the group face the same direction as their fathers.

1) What is the position of $S$ with respect to her mother-in-law?
(a) Second to the left
(b) Immediately to the right
(c) Third to the left
(d) Second to the right
(e) Third to the right
2) How many people sit between $W$ and his niece?
(a) None
(b) One
(c) Two
(d) Three
(e) four
3) Which of the following statements regarding $Q$ is definitely correct?
(a) $Q$ is a female
(b) V is the cousin of Q
(c) $R$ and $V$ are immediate neighbours of $Q$
(d) $Q$ is the grandmother of $T$
(e) $P$ is son of $Q$
4) What is the position of $V$ with respect to her uncle?
(a) Fourth to the left
(b) Immediately to the right
(d) Second to the right
(e) third to the right
(c) Third to the left
5) Who sits third to the right of $T$ ?
(a) Her father
(b) Her uncle
(c) Her aunt
(d) Her grandfather
(e) Her cousin
6) Who amongst the following sits exactly between $Q$ and $S$ ?
(a) W
(b) Q's wife
(c) R
(d) W's brother
(e) V
7) Who amongst the following has a male sitting to the immediate left as well as to the right?
(a) W
(b) S
(c) Q
(d) $R$
(e) Y
8) Who amongst the following faces outside?
(a) Q
(b) S
(c) W
(d) Y
(e) $R$

## 6) Study the following information carefully and answer the given questions.

A, B, C, D, E, F, G and H are sitting around a circular table, facing the centre. Each of them has a different profession, i.e. doctor, engineer, architect, pilot, banker, teacher, businessman and politician.
The politician sits third to the right of G . C is an immediate neighbour of G . The architect sits second to the right of C . B sits third to the right of H . H is neither a politician nor an architect. Only one person sits between $C$ and the teacher. A and $F$ are immediate neighbours of each other. Neither A nor F is a politician. The doctor sits second to the right of A. Two people sit between D and the engineer. D is not a politician. The pilot is not an immediate neighbour of the politician. The banker sits second to the left of A. Find each person's position and profession.
7)Study the following information carefully and answer the given questions.

Eight friends $P, Q, R, S, T, V, W$ and $Y$ are sitting around a square table. Four of them are sitting in the middle of the four sides and remaining four are sitting at corner of the table. Those who are sitting at corner of the table are facing towards center and others are facing in opposite direction.
$S$ is third to the right of P.Y is not next to $P$ or $S$. There is only one person between $P$ and V.Q is not immediate neighbour of V.P is looking towards center, T is third to the right of R. R is not immediate neighbour of $Y . R$ is not sitting in the middle of any side.

## Circular Table Arrangement - 2

Direction: (Q. 1 - 3) Read the following information carefully and answers the questions given below it.
Eight persons Vipin, Rani, Sanjay, Mahi Ajay Kunal Pappu and Bipin are sitting around a circular table three of them are facing centre and remaining five are facing outside.
Sanjay is immediate left of Mahi.
Mahi is second to the left of Rani and faces to the opposite direction as that of the Rani.
Ajay and Bipin are sitting opposite to each other.
Pappu sits opposite to the person who sits between Mahi and Rani.
No one sits between Ajay and Mahi. Ajay is second to the left of Pappu
The person who sits between Ajay and Pappu is facing centre.
Kunal and Ajay are immediate neighbours.
Kunal and Pappu are facing in the same direction.

1. Who is sitting opposite to the Mahi?
(a) Kunal
(b) Vipin
(c) Pappu
(d) Sanjay
2. Which of the following is the group of persons facing towards the centre?
(a)Rani, Ajay, Kunal
(b) Rani, kunal, Pappu
(c) Mahi, Kunal, Pappu
(d) Sanjay, kunal, Vipin
3. Which of the following is correct regarding Vipin?
(a) Vipin sits immediate Right of Pappu
(b) Vipin sits immediate Right of Bipin
(c) Both (a) and (b)
(d) None of these

Direction: (Q. 4 - 8) Read the following information carefully and answers the questions given below it.
Eight persons A, B, C, D, E, F, G and H are sitting around a circular table.
Only lightest person is facing towards the centre.
All the others are facing in opposite direction.
$A$ sits second to the right of $B$ and is heavier than $B$.
$D$ is heavier than $B$ and sits opposite to F.Only one person is heavier than $H$.
$B$ knows he is heavier than at least two persons. Only one person is lighter than $C$.
$E$ is heavier than F.G is not lightest or heaviest.
The persons are sitting in clockwise direction in the ascending order of their weights. No two persons are of same weight
4. Who is lightest person?
(a) F
(b) D
(c) F or D
(d) none of these
5. Who is heaviest person?
(a) A
(b) E
(c) F or D
(d) none of these
6. Who is third to the right of heaviest person?
(a) G
(b) E
(c) B
(d) cannot be determined
7. How many persons are lighter than $G$ ?
(a) 1
(b) 2
(c) 4
(d) none
8. How many persons are heavier than $E$ ?
(a) 2
(b) 1
(c) 3
(d) none

Read the following information carefully and answers the questions given below it.
Eight persons A, B, C, D, E, F, G, H are sitting equidistant around a circular table each one of which is wearing different colour shirt i.e. black, white, yellow, blue, red, purple, pink and violet not necessarily in the same order. Four of them are facing centre and remaining four are facing outside.
A is second to the left of a person who is wearing yellow shirt as well as second to the right of the person who is wearing red shirt.
C sits opposite to D and wear neither red nor yellow shirt.
A does not wear Blue shirt and the person who wears blue shirt is an immediate neighbour of D.E sits third to the right of D.
$F$ sits second to the right of $A$ and wears red shirt.
$B$ sits immediate right of $G$ and wears black shirt.
$H$ is facing same direction as $A$ and wears violet shirt.
G is facing centre.
Person who wears pink shirt is third to the right of the person who wears white.

## Read the following information carefully and answers the questions given below it.

Eight persons A, B, C, D, E, F, G, H are sitting equidistant around a circular table each one of which is wearing a cap of white or yellow or red colour. Some of them are facing towards the centre or in direction opposite to the centre.
$A$ sits opposite to $B$ and wears same coloured cap as that of $B$.
The person who wears white cap sits second to the right of the person wearing red cap.
The person who wears yellow cap sits second to the left of the person wearing white cap.
Only one person wears white cap.
Immediate neighbour of A do not wear yellow cap.
Immediate neighbour of $B$ do not wear white cap.
No two persons wearing red cap are immediate neighbours.
$D$ is wearing red cap but not an immediate neighbour of $A$ or $B$.
More than two persons wear red caps.
$E$ and $F$ are wearing same coloured caps.
$F$ is not immediate neighbour of $B . C$ is wearing white cap.
One of the immediate neighbours of H wears the same colour cap as that of H .
All the person wearing red caps are facing centre.
Immediate neighbours of $D$ are facing in the direction opposite to that of $D$
Immediate neighbours of $E$ are facing in the direction opposite to that of $E$
A is facing towards the centre.
Read the following information carefully and answers the questions given below it.
Eight persons are each one studying in one of the stream i.e. MBA or Engineering or Medical are sitting equidistant around a circular table.
Each stream has at least two students.
None of the engineering students are immediate neighbours.
Gopal and Mohan are immediate neighbours of Akash.
Naina sits opposite to Rahul and studies in MBA.
The person who is sitting second to the right of Naina studies in MBA.
Immediate neighbours of Rahul are not engineering students. Gopal sits opposite to Rajesh who is medical student. Three students are studying in engineering.
There is a pair of MBAs sitting opposite to each other.
Akash sits second to the right of engineering students but does not studying in engineering or medical.Rahul is facing centre. Suresh sits second to the left of Rajesh.
Sachin is immediate left of Suresh and faces opposite direction as that of Suresh.
Sachin is third to the left of Mohan.
Four persons are facing outward and remaining four are facing towards centre.

## Sitting Arrangement

Directions: Study the following information to answer the given questions.
Eight people are sitting
in two parallel rows containing four people each, in such a way that there is an equal distance between adjacent persons. In row -1 A, B, C and D are seated and all of them are facing South. In row -2 E,F,G and H are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. Each one of them also has a different profession, viz. engineer, doctor, teacher, pilot, businessman, banker, lawyer and builder but not necessarily in the same order.
$B$ sits second to right of the builder. G faces the immediate neighbour of the builder. Only one person sits between $G$ and the pilot, two people sit between $H$ and the lawyer. $D$ faces immediate neighbour of the pilot. Only one person sits between teacher and C. Teacher does not sit at any of the extreme ends. Immediate neighbour of $D$ faces the doctor. $E$ faces the engineer. $F$ is not the banker.

Directions: Study the following information to answer the given questions.
Twelve cars viz. Mercedes, Swift, Santro, Accord, Innova, Polo, Punto, Figo, Civic, City, Ferrari and Landrover are parked in two parallel rows containing six cars each, in such a way that there is an equal distance between adjacent cars. The cars parked in row-1 are parked in such a manner that driver seated in the cars would face the South. In row-2 cars are parked in such a manner that the drivers seated in these cars would face the North. Therefore, in the given parking arrangement each car parked in a row faces another car of the other row.

- Mercedes being a big car must be parked at one of the extreme ends. Mercedes is parked second to the left of Santro. Santro faces Figo.
- Punto and Innova are parked immediately next to each other. Neither is parked next to Figo or Santro.
- Civic is parked in such a manner that its driver when seated in the parked car would face South. Civic is parked third to the left of Polo.
- City is parked in such a manner that id faces Ferrari. Ferrari is parked second the left of Landrover. Landrover faces North and is not parked next to Figo.
- Swift is parked third to the right of Ferrari and faces Innova (Note: Left and right parking directions are with reference to the driver as if the driver is seated in the car.)

Directions: Study the following information to answer the given questions.
A building of seven floors (the ground floor counted as first floor) is owned by seven different person (one person owns one floor). Six out of these seven floors are used for different businesses while one of the floors is vacant.
The floor that has the Library is owned by K and it has three floors below it. There are three floors between the Insurance Company and the News paper office. The Grocery and the News paper office have one floor between them. The Bank is below the Travel Agency and they have two floors between them. The News Paper office is just below the Library.
J's floor is below K's floor and there are two floors between them. O owns a floor below P's floor and there are two floors between them, N's floor is immediately below L's floor. M is one of the owners.

## Directions: Study the following information to answer the given questions.

A group of Management students visited the HR departments of five different organizations on five different days during a field study session. The first visit was on Monday and last visit was on the last last day of the same week that is Sunday. Each visit was coordinated by different students - Pervez, Rajeev, Amit, Manish and Richa not necessarily in the same order.
The visit that was organised on Sunday was coordinated by Rajeev. The visit of Blue Dart was on Tuesday. The visit to the NGO - Tarang was coordinated by Manish and it was not on Saturday. The visit to the Hotel Taj was neither on Friday nor Saturday and it was coordinated by Pervez. Amit coordinated the visit that was on Thursday. There was a holiday the day after the visit to Blue Dart. The visit to the Aashirwad Plastics was before the visit to Group Pharmaceuticals.

## Directions:Study the following information to answer the given questions.

There are five friends $P, Q, R, S$ and $T$. Two of them play hockey while the other three play different games viz, football, cricket and polo. One hockey player and the polo player stay on the same floor 3, while the other three stay on different floors 2, 4 and 5 . Two of these five players are industrialists while the other three belong to different occupations viz, lawyer, C.A. and engineer. The polo player is the oldest in age while one of the hockey players who plays at the national level is the youngest. The other hockey player who plays at the regional level lies age wise exactly between the football player and the polo player. S is a regional player and stays on the floor 3 while T is a lawyer and stays on floor 5 . The football player is a C.A. and stays on floor $2, \mathrm{Q}$ is an engineer while $P$ is the industrialist and plays hockey at national level.

1. Who stays on floor 4?
(a) P
(b) Q
(c) $R$
(d) T
(e) S
2. What does T play?
(a) Polo
(b) Football
(c) Cricket
(d) Hockey at regional level
(e) Hockey at national level
3. Age wise, who among the following lies between $S$ and $T$ ?
(a) Lawyer
(b) Industrialist
(c) Engineer
(d)C.A
(e) Cannot be determined
4. Who all stay on the same floor 3 ?
(a) P \& Q
(b) S \& T
(c) Q \& S
(d) R \& T
(e) P \& S
5. What is the polo player's occupation?
(a) Engineer
(b) Industrialists
(c) C.A
(d) Lawyer
(e) Cannot be determined

## Directions:Study the following information to answer the given questions:

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row $-1 \mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}, \mathrm{T}$ and V are seated and all of them are facing South. In row -2 A, B, C, D,E and F are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.
A is seated third to the right of D. Neither A nor D sits at the extreme ends. T faces D. V does not face $A$ and $V$ does not sit at any of the extreme ends. $V$ is not an immediate neighbour of $T$. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V . Two persons sit between R and Q . R is not an immediate neighbour of T . C does not face $V$. $P$ is not an immediate neighbour of $R$.
6. Who amongst the following sit at extreme ends of the row?
(a) B,E
(b) $\mathrm{S}, \mathrm{T}$
(c) P,R
(d)B,F
(e) None Of These
7. Who amongst the following faces $A$ ?
(a) R
(b) T
(c) P
(d) Q
(e) S
8. How many persons are seated between T and S ?
(a)One
(b) Two
(c) Three
(d) Four
(e) None
9. $P$ is related to $V$ in the same way as $C$ related to $F$. To which of the following is $E$ related to, following the same pattern?
(a) B
(b) D
(c) C
(d) A
(e) None of these
10. Which of the following is true regarding F?
(a) F sits second to the right of C
(b) $F$ is not immediate neighbour of $A$
(c) $F$ sits third to the left of $D$
(d) F sits at one of the extreme ends of line
(e) F faces V
11. Who amongst the following sits exactly between $P$ and $Q$ ?
(a) $R$
(b) V
(c) S
(d) T
(e) Can't be determined

## Directions:Study the following information to answer the given questions

Twelve people are sitting in two parallel rows containing six people each such that they are equidistance from each other. In row 1: P,Q,R,S,T and $V$ are seated and all of them are facing south. In row 2: A,B, C,D,E and F are seated and all of them are facing north. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.
$S$ sits third to the right of $Q$. Either $S$ or $Q$ sits at an extreme end of the line. The one who faces $Q$ sits second to the right of $E$. Two people sit between $B$ and $F$. Neither B nor $F$ sits at an extreme end of the line. The immediate neighbour of $B$ faces the person who sits third to the left of $P$. $R$ and $T$ are immediate neighbour. $C$ sits second to the left of $A$. $T$ does not face the immediate neighbour of $D$.
12. Who amongst the following sit at the extreme end of rows?
(a) S, D
(b) Q, A
(c) V, C
(d) P,D
(e) Q, F
13. Who amongst the following faces $S$ ?
(a)A
(b) B
(c) C
(d) D
(e) F
14. How many persons are seated between $V$ and $R$ ?
(a)One
(b) Two
(c) Three
(d) Four
(e) None of these

## Analytical Reasoning

1.Ques (I to III) :Read the following information carefully and answer the questions given below it.
i) There are six friends $A, B, C, D, E$ and $F$
ii) Each one is proficient in one of the games, namely Badminton, Vollyball, Cricket, Hockey, Tennis and Polo
iii) Each owns a different coloured car, namely yellow, green, black, white, blue and red.
iv) D plays Polo and owns a yellow coloured car
v) C does not play either Tennis or Hockey and owns neither blue nor yellow coloured car
vi) E owns a white car and plays Badminton
vii) B does not play Tennis; he owns a red coloured car.
viii) A plays Cricket and owns a black car
I)Who plays Volleyball?
(a) B
(b) C
(c) F
(d) Data inadequate
e) None of these
II) Which coloured car F owns?
(a) Green
(b) Blue
(d) Data inadequate
(e) None of these
(c) Either Green or Blue
III)Which of the following combinations of colour of car and game played is not correct?
(a) Yellow - Polo
(b) Green - Tennis
(c) Black - Cricket
(d) Red-Hockey
(e) None of these

## 2.Ques(I to $V$ ) :Read the following information carefully and answer the questions given below it.

Rohit, Kunal, Ashish and John are students of a school. Three of them stay far from the school and one near it. Two study in class IV, one in class V and one in class VI. They study Hindi, mathematics, Science, Social Science. One is good at all the four subjects while another weak in all of these. Rohit stays far from the school and good at Mathematics only while Kunal is weak in Mathematics only and stays close to the school. Neither of these two nor Ashish studies in class VI. One who is good at all the subjects studies in class V .
I) Name of the boy who is good at all the subjects.
(a)Rohit
(b) Kunal
(c) Ashish
(d) John
II)Name the boy who is weak in all the subjects
(a)Rohit
(b)Kunal
(c) Ashish
(d)John
III)Which two boys are good at Hindi
(a) Rohit \& Kunal
(b) Kunal \& Ashish
(c) Ashish \& John
(d) John \& Rohit
IV)Which two boys are good at Mathematics
(a) Rohit \& Ashish
(b) Kunal \& Ashish
(c) John \& Ashish
(d) Rohit \& John
V)Other than Rohit and the boy good at all the subjects, who else stays far from the school?
(a) Rohit
(b) Kunal
(c) Ashish
(d) John

## 3. Ques (I -V):Read the following information carefully and answer the questions given below it.

i) There are eight faculty members $A, B, C, D, E, F, G$ and $H$ in the institute, each teaching different subject.
ii) There are three lady members and of the eight, four are holding Ph. D degree.
iii) E teaches Psychology and is Ph.D. A teaches Chemistry.
iv) The one who teaches Economics is not Ph.D. No lady member teaches either Commerce or law. Law faculty does not award Ph. D.
v) D and G do not teach either Commerce or physics.
vi) H and C are lady members and not Ph. D. F who is Ph.D teaches Zoology.
vii) $B$ and $G$ have Ph.D and $G$ is a lady member.
I) Which of the following lady members is/are Ph.D?
(a) G
(b) C and D
(c) G and H
(d) None of these
II) Which of the following combinations is NOT correct?
(a) Chemistry - Male - Not Ph. D
(b) Zoology - Male - Ph. D
(c) Physics - Lady - Ph. D
(d) Economics - Lady - Not Ph. D
III) Who teaches Physics?
(a) C
(b) H
(c) Either H or C
(d) None of these
IV) Which of the following statements is true?
(a) Three Male members are Ph. D.
(b) Two Lady Members are Ph. D.
(c) The person who teaches Economics is Ph. D
(d) None of these
V) What is the subject taught by G?
(a) Zoology
(b) Either Physics or Economics
(c) Either Physics or Zoology
(d) Cannot be determined
4) Through his enquiries Sherlock Holmes was able to bring about the arrest of James Mach for the poisoning of four guests in the lounge of the Windsor Hotel. In each case a poison had been added to their drinks. The four guests, Mr. Presley, Mr. Bolton, Mr. Mclean and Me. Lennon, despite receiving medical attention, died as a result of the evil man's action. From the following information can you deduce what each of four men was drinking, and identify the poison administered to each?
> Mr. Presley drank brandy, but he wasn't poisoned with strychnine nor aconitine.
> Mr. McLean didn't drink wine, nor was he poisoned with cyanide.
> The person who drank gin was poisoned with strychnine.
> The person poisoned with arsenic drank wine, not port. .
> Mr. Bolton had lunch with wine drinker.
> It was either Mr. Lennon or Mr. McLean who drank port.
5) Four houses in a private street were robbed Professor Moriarty on the same evening. In each case the household's pet dog had been drugged before the deed had been carried out. Sherlock Holmes was naturally called in to investigate. From the following information can you identify the name of each of house, the householder, and the type of dog kept on the premises?
$>\quad$ The person who lived next door to 'The Beeches' had the German Shepherd.
$>\quad$ Mr. Miles, who had the Boxer, didn't live at 'The Beeches' nor 'Elmwood'.
$>\quad$ The person who lived at 'Oaklee' had the retriever.
$>\quad$ Mr. Potts didn't live at 'Elmwood' or 'Firbank', nor did he have the German Shepherd.
> Mr. Todd didn't have the Airedale.
> Mr. Swinton didn't live at 'Oaklee' nor did he have the German Shepherd.
6) Sherlock Holmes, while enjoying a quiet evening at his club, sat watching four new members playing cards. The four members were, Messers Simpson, Henderson , Jansen and Baker. Their professions were that of Banker, Solicitor, Shopkeeper and Doctor - but not necessarily in that order. During the game Sherlock Holmes was supplied the following information by Watson:

1. Neither Baker nor Jansen knew the banker very well.
2. The doctor was related to Simpson, who sat opposite the solicitor.
3. Henderson had won more games than the shopkeeper and the same amount as Baker.
4. The shopkeeper sat next to Jansen who was not the doctor. Can you match up each of four men with their respective occupations?
7) Five elderly gentleman who lived in cottages close to each other had the experience of having their houses burgled on the same evening. Sherlock Holmes was called in to investigate the whole affair. From the following information can you identify each person with the house he lived in and give that person's age?
1. Neither the 58 yr old nor the 56 yr old lived at Oakhouse.
2. Mr. Green was older than Mr. Black.
3. Neither Mr. Brown nor Mr. Plumb lived at Seaview.
4. Mr. Plumb was two years older than Mr. Brown .
5. Neither Mr. Grey nor Mr. Green lived at Mid- cottage.
6. Mr. Plumb wasn't the 62 yr old who lived at Mid-cottage.
7. Mr. Green wasn't the 60 yr old nor did he live at Oakhouse.
8. Mr. Black lived at Crompton house but he wasn't the 64 yr old.
9. Mr. Grey wasn't the 64 yr old who lived at Pathway Hall.
8) Sherlock Holmes was in hot pursuit of a criminal whom he wished to question about a certain robbery in the city. He knew the man was hiding at the home of one of his friends .Jack, Frank, Ted and John, all of whom had just been sentenced to goal for other crimes. Holmes knew that each of the four had nicknames in the underworld, but didn't know which nickname was related to each of them.
So in order to find out more Holmes, in one of his many disguises, had himself placed in the next cell to one of the men. From the conversation that took place Sherlock Holmes got the following information:
> Jack and 'The knife' had both been goaled for longer than 'The Dip'.
> Ted had been goaled for longer that 'The Lamp'.
> Frank and ' The Peter', who was not Ted, found that they had been arrested at the same time.
> 'The Lamp', who is not Frank, had been goaled for longer than John. From this can you match each man with his nickname?
9) Five criminals had hidden five different sacks of money in and around the area of London docks. From the following information can you deduce who found whose sack of money and how long it took them?
> The sack hidden by Jones was found after one hour, but not by Inspector Lestrade or Constable smith.
> Watson found a sack half an hour after Sergeant Black found his hidden sack.
> The sack found after 4 hours was found by Sherlock Holmes but it hadn't been hidden by Wilson or Clark.
> The sack hidden by Bolt was found before the sack hidden by Davis, but not by Inspector Lestrade or Sergeant Black.
> One sack was found after 2 hours and another after 3 hours.
> Wilson's sack was found half an hour after the sack hidden by Bolt, but not by Constable Smith.
10) Four criminals - Moriarty, Norman and White carried out a robbery from several safety deposite boxes. The items stolen were : diamonds, rubies, emeralds and sapphires. In keeping with their plans each took all the stones of one particular kind to their separate hideouts which were located some 2 miles, 4 miles, 6 miles and 8 miles from the scene of the crime. Within hours of the robbery the four were being tracked down separately by Sherlock Holmes. Doctor Watson, Inspector Lestrade and Sergeant Black. From the following information can you deduce how far each criminal's hideout was from the scene. Which stones were in their possession and who was tracking them?
> Moriarty, whose hideout was two miles further from the scene than White's, didn't have the diamonds nor was he being tracked by Sherlock Holmes or Lestrade.
> Watson was in pursuit of the criminal with the rubies, but this wasn't Andrews.
> Sergeant Black had to pursue his criminal some four miles further from the scene than Lestrade had to pursue his.
> The person whose hideout was four miles from the scene had the diamonds.
> Norman's hideout was two miles further from the scene than that of the person with the Emeralds.
> White, who had the sapphires, wasn't being pursued by Lestrade.
11) Sherlock Holmes visited the infamous Professor Moriarty in Wormwood Scrub Prison where he was serving a sentence for robbery. To his astonishment, Holmes discovered that Moriarty had taken up painting along with four other prisoners in his particular wing. From the following information can you deduce each of the five prisoners' prison number, his sentence and the type of painting he was doing?
12) The prisoners were serving sentences of 5 yrs., 7 yrs ., 10 yrs ., 12 yrs . and 15 yrs .
13) Moriarty wasn't the prisoner with number 124 who painted landscapes.
14) Dale was serving a sentence that was two years shorter than that of the prisoner who painted portraits.
15) Mann, who didn't paint horses, had a prison no. that was higher than Moriarty's who wasn't serving 10 years, didn't have the no. 123 and didn't paint still life.
16) Wyatt was serving 12 years: he had an odd prison no. but didn't paint birds.
17) Tanner, who had the prison no. 126 was serving a longer prison sentence than the prisoner who had the no. 125 and painted portraits.
18) Prisoner 123 painted horses, while prisoner 127, who didn't have the longest sentence, painted birds.
19) The still life painter was serving over 10 years, he wasn't the prisoner with the number 127 who was also serving over 7 years.

## 12)Directions for question 1 to 4 : These questions are based on the following information.

Five persons - Sachin, Bhajji, Yuvraj, Veeru and Mahi are comparing their incomes and expenditure. The following information is also known.
> No two persons have equal income or equal expenditure.
$>$ The income of each person is more than his expenditure.
> The income of Sachin is more than that of Mahi and expenditure of Yuvraj is more than that of Veeru.
> The income of Bhajji is less than the expenditure of Mahi.
$>$ The person, whose income is the second highest, has the least expenditure and the person with the highest income has the highest expenditure.
$>$ The income and the expenditure of Veeru is more than the income and the expenditure of Mahi respectively.

1. Who has the least expenditure?
(a) Yuvraj
(b) Sachin
(c) Veeru
(d) Bhajji
(e) Mahi
2. Who has the third highest income ?
(a) Yuvraj
(b) Sachin
(c) Veeru
(d) Bhajji
(e) Mahi
3. Who has the second highest expenditure?
(a) Yuvraj
(b) Sachin
(c) Veeru
(d) Bhajji
(e) Mahi
4. Who among the following has the highest saving?
(a) Sachin
(b) Veeru
(c) Bhajji
(d) Mahi
(e) Either Sachin or Yuvraj
13) There are five friends Asha, Bappi, Udit,,Sonu and Usha, each one has different profession Teacher, Shopkeeper, Doctor, Banker, Engineer and each person earns different amount every month.
Usha does not earn more than the Engineer. Udit does not earn more than the Doctor. Asha does not earn more than the Banker. Bappi earns more than teacher. Udit earns more than banker, who earns more than shopkeeper. Usha earns more than Bappi.
A)Which What is Asha's profession?
(a) Teacher
(b) Engineer
(c) Doctor
(d) Banker
B) Who is the Banker?
(a) Asha
(b) Udit
(c) Usha
(d) Sonu
C) Who earns the highest?
(a) Asha
(b) Udit
(c) Usha
(d) Sonu
D) Which is Sonu's profession?
(a) Doctor
(b) Engineer
(c) Doctor
(d) Banker
14) Seven friends SRK, $A B, R K, A K, H R, A D, T K$ are students of MBA, Engineering and Law. Each stream has at least two but not more than 3 students. Each of them likes to play different musical instruments in his spare time. Tabla, Piano, Violin, Flute, Xylophone, Drum, Guitar but not necessarily the same order.
HR does not study MBA and likes to play Drum. The one who likes to play Violin studies Law. AB studies Engineering only with AD. RK likes to play Tabla \& studies in same stream as AK and SRK. No one studying in MBA like Piano or Xylophone. AK does not like to play Guitar and AB does not like Xylophone.
A) Which instruments does AB play?
(a) Drum
(b) Piano
(c) Guitar
(d) Tabla
(e) Cannot be determined
B) Who likes to play Flute?
(a) AK
(b) $A B$
(c) SRK
(d) TK (e) None of these
C) Which of the following represents students studying in Law?
(a) HR, AD
(b) TK, SRK
(c) HR,TK
(d) $A B, A D$
(e) None of these
D) Which of the following combinations of students- stream - instrument is correct?
(a) AK- Law- Flute
(b) AB- MBA- Piano
(c) SRK- MBA - Xylophone
(d) TK- Law - Violin
(e) None of these
E) Which instrument does AD like?
(a) Flute
(b) Xylophone
(c) Piano
(d) Violin
(e) Cannot be determined
15) Joe , Ned, Mary, Larry,Paul, Willy, Crystal, Albert, Bob,Frank,Ellen and Rick all live in the same six floor building. There are two apartments per floor. No more than two persons live in any apartments. Some apartments may be empty.
$>$ Larry and his roommate live two floors above Albert and his roommate, Crystal.
$>$ Joe lives alone, three floors below Willy and two floors below Ellen.
> Mary lives one floor below Albert and Crystal.
$>$ Ned lives three floors above the floor on which Bob and Frank have single apartments.
> Rick and Paul live in single apartments two floors below Mary.
a) Which of the following lists the persons named in the correct order, going from the bottom floor to the top?
(A) Rick, Bob, Mary, Albert, Larry, Ned
(B) Rick, Frank, Ned, Ellen, Larry, Crystal
(C) Paul, Bob, Joe, Crystal, Ned, Larry
(D) Larry, Joe, Mary, Albert, Bob, Rick
b) Which of the following pairs must live on the same floor?
I. Ned, Ellen
II. Joe, Mary
III. Albert, Larry
(A) I only
(B) III only
(C) I and II only
(D) II and III only
(E) I, II, and III
C) Larry's roommate, assuming that he or she is one of the persons mentioned, is
(A) Ellen
(B) Willy
(C) Mary
(D) Ned
(E) Paul
d) Rick lives on the
(A) first floor, below Bob or Frank
(B) Second floor, below Joe or Albert and Crystal
(C) third floor, opposite Albert and Crystal (D) fourth floor, opposite Albert and Crystal
(E) fourth or sixth floor or both
e) An empty apartment or empty apartments may be found on the
(A) second floor only
(B) fourth floor only
(C) fifth floor only
(D) third or sixth floor, but not both (E) fourth or sixth floor or both
f) Joe arranges to move into an apartment two floors down, whose occupant moves into an apartment one floor up. The occupant of this apartment moves into one three floor up, whose occupant takes Joe's old apartment. The new occupant of Joe's old apartment is
(A) Bob or Frank
(B) Ned or Ellen
(C) Mary
(D) Rick
(E) Paul
g) Dorothy lives with a roommate. Her roommate could be any of the following EXCEPT
(A) Willy
(B) Mary
(C) Ned
(D) Ellen
(E) Frank
16. Sherlock Holmes, Doctor Watson, Inspector Lestrade and the infamous Professor Moriarty had all tried their hand at writing a crime novel. From the following information can you identify each person's book and the pseudonym he used?
17. Sherlock Holmes didn't use the pseudonym "George Scot", which was the pseudonym used by the author of Gaslight.
18. The novel, The room was written by the person using pseudonym "James Barrymore".
19. Mariarty used the pseudonym "Clive Mills", but he didn't write the novel, Foul Play.
20. The person using the pseudonym "Arthur Doyle" didn't write Iron Fist nor gaslight.
21. Lestrade who didn't use pseudonym with the longest surname, though that Watson used the pseudonym "Arthur Doyle", but he was wrong.
22. Five criminals were observed by Sherlock Holmes in the ticket office at railway station. Holmes knew that they had all worked together on a large bank robbery, so he decide to observe
their movements that morning. From the following information can you work out where each of
the criminals was travelling to, and from which platform they each caught their train?
23. Fletch was going to Liverpool, but his train didn't depart from platform one or five.
24. Defoe caught his train from an even numbered platform but he wasn't going to Brighton or Bristol.
25. The person on platform 4 caught the train to Cambridge.
26. Fletch's train left before Pope's train which left before the Brighton train that departed from platform 1.
27. Snoody didn't catch the Manchester train which departed from platform 2.
28. Both Pope and Crow caught their trains from odd numbered platforms, but neither from no. 3.
29. Sherlock Holmes was investigating a series of robberies that had taken place in the, Hammersmith area - one robbery each night from Monday - Friday, carried out by a different robber on each occasion. Each robber made the mistake of leaving a clue at the scene of the crime, which made it simple for the great detective to track them down. From the following
information can you deduce on which day each robber carried out his crime, which item he stole and the clue he left at the scene?
30. James, not Eric. stole the painting- but not on Wednesday.
31. Leo, who didn't leave the gloves or the crowbar at the scene of the crime, committed his robbery on Tuesday.
32. Peter left his wallet at the scene of the crime which he didn't commit on Monday, nor did he steal the money or the gold.
33. The gold was stolen on Wednesday. but not by Harry. and neither the fingerprints nor the
gloves were left at the scene.
34. It was the diamonds, not the silver ,that were stolen on Thursday. and it wasn't the footprint
nor the fingerprints that were left at the scene
35. The diamonds were stolen before the Silver and neither the gloves \& nor the fingerprints were
left at either crime.
36. The footprints was found at the scene of the crime which was committed on Wednesday. The crowbar was found at the scene of the crime committed the day after the crime when the wallet was left at the scene.
37. As a result of excellent work by Sherlock Holmes the infamous Professor Moriarty was being held in the special security wing of Wormwood Scrubs Prison. In all there were twelve cells in the special wing, four on each landing. (see the diagram). From the following information can you place each prisoner in his proper cell?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

1. Little's cell was on the landing directly below the landing where Robb and Gunn had their cells.
2. Pearce's cell was directly above Conn's cell who was on the landing above the landing where Hobbs and Webb had their cells.
3. Field had his cell directly to the right of Webb's cell and directly below the cell occupied by Robb. .
4. Tibb's had his cell directly to the left of Milne's cell, who was directly above Moriarty.
5. Kidd's cell was directly to the left of the cell occupied by Pearce.
6. Moriarty was in the cell directly above the cell occupied by Webb.
7. Hobb's cell was directly below Gunn's cell.
8. Below is a Quiz written by Einstein in the last century. He said $98 \%$ of the people in the world cannot solve the quiz. Are you among the other $\mathbf{2 \%}$ ?
There are 5 houses of 5 different colours in a row. They are numbered 1 to 5 from left to right. In each house lives a person with a different nationality. These 5 owners drink a certain beverage, smoke a certain brand of cigar and keep a certain pet. No owners have the same pet, smoke the same brand of cigar or drink the same drink. HINTS:
9. The Brit lives in a red house.
10. The Swede keeps dogs as pets.
11. The Dane drinks tea.
12. The green house is on the immediate left of the white house.
13. The green house owner drinks coffee.
14. The person who smokes Pall Mall rears birds.
15. The owner of the yellow house smokes Dunhill.
16. The man living in the house right in the centre drinks milk.
17. The Norwegian lives in the first house.
18. The man who smokes blend lives next to the one who keeps cats.
19. The man who keeps horses lives next to the man who smokes Dunhill.
20. The owner who smokes Blue Master drinks beer.
21. The German smokes Prince.
22. The Norwegian lives next to the Blue House.
23. The man who smokes blend has a neighbour who drinks water.

## Solution:

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- |
| Norwegian | Dane | Brit | German | Swede |
| Water | Tea | Milk | Coffee | Beer |
| Yellow | Blue | Red | Green | White |
| Cats | Horses | Birds | X | Dogs |
| Dunhill | Blend | Pallman | Prince | Bluemaster |

## Logical Reasoning

(Q 1-5):Study the following information and answer the questions given below:

- Ashland is north of East Liverpool and West of Coshocton
- Bowling Green is north of Ashland and west of Frederick town
- Dover is south and east of Ashland
- East Liverpool is north of Fredericktown and east of Dover.
- Frederick town is north of Dover and west of Ashland
- Coshocton is south of Frederick town and west of Dover.

1. Which of the towns mentioned is furthest to the northwest?
(a) Ashland
(b) Bowling Green
(c) Coshocton
(d)East Liverpool
(e) Fredericktown
2. Which of the following must be both north and east of Fredericktown?
(A) Ashland
(B) Coshocton
(C) East Liverpool
(a) Only A
(b) Only B
(c) Only C
(d) Both A and $\mathrm{B}(\mathrm{e})$ Both

A and C
3. Which of the following towns must be situated both south and west of at least one other town?
(a) Ashland only(b) Ashland and Fredericktown
(c) Dover and Fredericktown
(d) Dover, Coshocton and Fredericktown
(e) Dover, Coshocton and East Liverpool
4. Which of the following statements, is true, would make the information in the numbered statements more specific?
(a) Coshocton is north of Dover
(b) East Liverpool is north of Dover
(c) Ashland is east of Bowling Green
(d) Coshocton is east of Fredericktow
(e) Bowling Green is north of Fredericktown
5. Which of the numbered statements gives information that can be deduced from one or more of the other statement?
(a) Only i
(b) Only ii
(c) Only iii
(d) Only iv
(e) Only v
(f) Only vi
(Q 6-9):Study the following information and answer the questions given below:
For a motorist there are three ways of going from City A and To C. By way of a bridge the distance is 20 miles and the toll is 75C. A tunnel between the two cities is a distance of 10 miles and the toll is $\$ 1.00$ for the vehicle and driver plus $10 \mathbb{C}$ for each passenger. A two lane highway without tolls goes east for 30 miles to City B and then 20 miles in a northwest direction to City C.
6. Which of the following is the shortest route from City B and to City C?
(a) Directly on the toll free highway to City C
(b) The bridge
(c) The tunnel.
(d) The tunnel or the bridge
(e) The bridge only if traffic is heavy on the toll free highway.
7. The most economical way of going from City A to City B in terms of tolls and distance, is to use the
(a) Tunnel
(b) Bridge
(c) Bridge or tunnel
(d) Toll free highway
(e) Bridge and highway
8. Martin usually drives alone from City C to City A every working day. His firm deducts a percentage of employee pay for lateness. Which factor would most probably influence his choice of bridge or the tunnel?
(a) Whether his wife goes with him
(b) Scenic interest of each route
(c) Traffic conditions on road, bridge and tunnel
(d) Saving of 25 C in tolls
(e) Price of gasoline consumed in covering the 10 additional miles on the bridge.
9. In choosing between the use of the bridge and the tunnel, the chief factor (s) would be
(a) Traffic and road condition
(b) Number of passengers in the car
(c) Location of one's home in the center or outskirts of one of the cities
(d) Desire to save 25®
(a) Only A
(b) Only B
(d) Only C and D
(e) Only A and B
(c) Only B and C
(Q 10-13):Study the following information and answer the questions given below:
In a certain society, there are two marriage groups, Red and Brown. No marriage is permitted within a group. On marriage, males become part of their wife's groups, women remain in their own group. Children belong to the same group as their parents. Widowers and divorced males revert to the group of their birth. Marriage to more than one person at the same time and marriage to a direct descendant are forbidden.
10. A brown female could have had.
A) A grandfather born red
B) A grandmother born red
C)Two grandfathers born Brown.
(a) Only A
(b) Only B
(c) only A and B
(d) Only B and C
(e) All A, B, and C
11. A male born into the Brown group may have
(a) An uncle in either group
(b) A Brown daughter
(c) A brown son
(d) A son-in-law born in the Red group
(e) A daughter-in-law born in the Red group
12. Which of the following is not permitted under the rule as stated?
(a) A brown male marrying his father's sister
(b) A Red female marrying her mother's brother
(c) A man born Red, who is now a widower, marrying his brother's widow
(d) A widower marrying his wife's sister
(e) A Widow marring her divorced daughter's ex-husband
13. If widowers and divorced males retained the group they had upon marrying, which of the following would be permissible? (Assume that no previous marriages occurred)
(a) A woman marrying her dead sister's husband
(b) A woman marrying her divorced daughter's ex-husband
(c) A widower marrying his brother's daughter.
(d) A woman marrying her mother's brother who is a widower
(e) A divorced male marrying his ex-wife's divorced sister.
(Q 14-17): Study the following information and answer the questions given below:

- A causes B or C, but not both
- F occurs only if B occurs
- D occurs if B or C occurs.
- E occurs only if $C$ occurs
- J occurs only if E or F occurs
- D causes G or H or both
- H occurs if E occurs
- G occurs if F occurs

14. If A occurs which may occur?
I. F and G
II. E and H
(a) Only I
(b) Only II
(c) Only III
(d) Either I and III or II and III, but not both
(e) All I, II and III
III. D
15. If $B$ occurs, which must occur?
(a) F and G
(b) D and G
(c) D
(d) G and H
(e) J
16. If $J$ occurs, which must have occurred?
(a) E
(b) Both E and F
(c) Either B or C
(d) $G$
(e) Both B and C
17. Which may occur as a result of cause not mentioned?
I. D
II. A
III. F
(a) Only I
(b) Only II
(c) Only I and II
(d) Only II and III
(e) All I II, and III
(Q 18 - 21): Read the following information carefully and answer questions given below it.

- All G's are H's
- All G's are J's or K's
- All J's and K's are G's
- All L's are K's
- All N's are M's
- No M's are G's

18. Which of the following can be logically deducted from the conditions stated?
(a) No M's are H's
(b) No M's that are not N's are H's
(c) No H's are M's
(d) Some M's are H's
(e) No N's are G's
19. Which of the following are inconsistent with one or more of conditions?
(a) All H's are G's
(b) All H's that are not G's are M's
(c) Some H's are both M's and G's
(d) No M's are H's
(e) All M's are H's
20. The statement No L's are J's is
I) Logically deducible from the conditions stated.
II) Consistent with but not deducible form the conditions stated.
III)Deducible from the stated conditions together with the additional statement No J's are K's.
(a) Only I
(b) Only II
(c) Only III
(d) Only II and III
(e) Neither I, II nor III
21. If no P's are K's which of the following must be true?
(a) All P's are J's
(b) No P is a G
(d) If any P is an H it is a G
(e) If any $P$ is $G$ it is a $J$
(Q 22-27):Read the following information carefully and answer questions given below it.
The letters A, B, C, D, E, F, and G, not necessarily in order, stand for seven consecutive integers 1 to 10 .
$D$ is 3 less than $A$
$B$ is the middle term
$F$ is as much less than $B$ as $C$ is greater than $D$
$G$ is greater than $F$
22. The fifth integer is
(a) A
(b) C
(c) D
(d) E
(e) F
23. $A$ is as much greater than $F$ as which integer is less than $G$ ?
(a) A
(b) B
(c) C
(d) D
(e) E
24. If $A=7$, the sum of $E$ and $G$ is
(a) 8
(b) 10
(c) 12
(d) 14
(e) 16
25. $A-F=$ ?
(a) 1
(b) 2
(c) 3
(d) 4
(e)Cannot be determined
26. An integer $T$ is as much greater than $C$ as $C$ is greater than $E, T$ can be written as $A+E$ what is D ?
(a) 2
(b) 3
(c) 4
(d) 5
(e) Cannot be determined
27.The greater possible value of $C$ is how much greater than the smallest possible value of D?
(a) 2
(b) 3
(c) 4
(d) 5
(e) 6
(Q 28 - 31):Read the following information carefully and answer questions given below it.
Five teams participated in Pepsi Cup. Each team played against each other. The top teams played finals. A win fetched 2 points and a tie 1 point.

- South Africa were in the finals.
- India Defeated SA but failed to reach the finals.
- Australia lost only one match in the tournament.
- The match between India and Sri Lanka was a tie.
- The team which won all the league matches, lost in the finals.
- England was one of the best teams that did not qualify
28.Who were the finalists?
(a) SA \& India
(b) Aus \& SL
(c) SA \& SL
(d) None
29.Who won the finals?
(a) Aus
(b) SL
(c) SA
(d) Can't be determined
30.How many matches did India win?
(a) 0
(b) 1
(c) 2
(d) Can't be determined
31.What was the outcome of the India England Match?
(a) India won
(b) England won
(c) It was a tie
(d) Can't be determined
(Q 32-33): These questions are based on situations given below:
Uni cricket players are to be honored at a special luncheon. The players will be seated on a dais along one side of a single rectangular table. A and $G$ have to leave the luncheon early and must be seated at the extreme right end of table, which is closest to exit. B will receive Man of the Match and must be in the centre chair C and D who are bitter rivals for the position of wicket keeper dislikes one another and should be seated as far as apart as possible $E$ and $F$ are best friends and want to seat together.
32.Which of the following may not be seated at either end of the table?
(a) C
(b) D
(c) G
(d) F
33.Which of the following pairs may not be seated together?
(a) E \& A
(b) B \& D
(c) C \& F
(d) G \& D


## (Q 34 - 37): Read the following information carefully and answer questions given below it.

An employee has to allocate offices to 6 staff members. The offices are no. 1-6. The offices are arranged in a row and they are separated from each other by dividers.
Hence voices, sounds and cigarette smoke flow easily from one office to another Miss $R$ needs to use the telephone quite often throughout the day. Mr. M and Mr. B need adjacent offices as they need to consult each other often while working.
Miss H is a senior employee and has to be allotted the office no. 5, having the biggest window. Mr. D requires silence in office next to his. Mr. T, Mr. M and Mr. D are all smokers. Miss H finds tobacco smoke allergic and consecutively the offices next to her are occupied by non-smokers. Unless specifically stated all the employees maintain an atmosphere of silence during office hours.
34.The ideal candidate to occupy office farthest from Mr . B will be
(a) Miss H
(b) Mr. M
(c) Mr . T
(d) Mr. D
35.The three employees who are smokers should be seated in the offices
(a) 124
(b) 236
(c) 123
(d) 246
36.The ideal office for Mr . M would be
(a) 2
(b) 6
(c) 1
(d) 3
37. In the event of what occurrence within a period of one month since the assignment of the offices would a request for a change in office be put forth by one or more employees?
(a) Mr. D quitting smoking
(b) Mr. T taking over duties formally taken care of by Miss R
(c) The installation of a water cooler in Miss H's office
(d) Mr. B suffering from anaemia
(Q 38 - 39):Read the following information carefully and answer questions given below it.
A robot moves on a graph sheet with $x-y$ axes. The robot is moved by feeding it with a sequence of instructions. The different instructions that can be used in moving it, and their meanings are: Instruction Meaning GOTO ( $\mathrm{x}, \mathrm{y}$ ) move to point with co-ordinate ( $\mathrm{x}, \mathrm{y}$ ) no matter where $u$ are currently WALKX ( $P$ ) move parallel to $x$-axis through a distance of $p$, in the positive direction if $p$ is positive and in negative if $p$ is negative WALKY $(P)$ move parallel to $y$-axis through a distance of $p$, in the positive direction if $p$ is positive and in negative if $p$ is negative.
38. The robot reaches point $(5,6)$ when a sequence of 3 instructions is executed, the first of which is GOTO ( $x, y$ ), WALKX (2), WALKY (4). What are the values of $x$ and $y$ ?
(a) 2,4
(b) 0,0
(c) 3,2
(d) 2, 3
39.The robot is initially at ( $x, y$ ), $x>0$ and $y<0$. In how many minimum steps can he reach the origin if GOTO is not allowed.
(a) 2
(b) 1
(c) $x+y$
(d) 0
(Q 40-42):Read the following information carefully and answer questions given below it.
Ten coins are distributed among 4 people $\mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}$ such that one of them gets a coin, another gets 2 coins, $3^{\text {rd }}$ gets 3 coins, and $4^{\text {th }}$ gets 4 coins. It is known that $Q$ gets more coins than P , and S gets fewer coins than R .
40. If the number of coins distributed to $Q$ is twice the number distributed to $P$ then which one of the following is necessarily true?
(a) R gets even number of coins
(b) R gets odd number of coins
(c) S gets even number of coins
(d) S gets odd number of coins
41. If $R$ gets at least two more coins than $S$ which one of the following is necessarily true?
(a) $Q$ gets at least 2 more coins than $S$
(b) Q gets more coins than $P$
(c) P gets more coins than S
(d) $P$ and $Q$ together get at least five coins
42. If $Q$ gets fewer coins than $R$, then which one of the following is not necessarily true?
(a) $P$ and $Q$ together get at least 4 coins
(b) Q and S together get at least 4 coin
(c) $R$ and $S$ together get at least 5 coins
(d) $P$ and $R$ together get at least 5 coins

## Verbal Reasoning

1. There are identical twins Salman and Shahrukh. Salman speaks truth on Monday, Wednesday, Friday and Sunday while Shahrukh speaks truth on Tuesday, Thursday, Saturday and Sunday. And they lie on the remaining days. One fine day, I met one of them on the street and asked him, "What is the day today?". He replied "Today is Sunday ". After some time I met the other guy and asked him the same question and he replied, "Today is Tuesday ". Find what day it was and whom did I meet first?
2. There is a couple Mr. and Mrs. Love Birds. Mr. Love Birds lies on Monday, Tuesday and Wednesday. While Mrs. Love Birds lies on Thursday, Friday and Saturday. One fine day, Mr. Love Birds said, "Yesterday I lied". Mrs. Love Birds replied, "Yesterday even I lied". Find on which day of the week the conversation occurred.
3. There are 4 persons Jai, Veeru, Basanti and Gabbar. Each one of them had a different weight. All four gave a statement. Among the four statements only the person who is the lightest in weight gave a true statement.
Gabbar says: Basanti is heavier than Veeru.
Basanti says: Gabbar is heavier than Jai. Jai says:I am heavier than Veeru.
Veeru says: Jai is heavier than Basanti
Find the lightest person and list the persons in ascending order according to their weight.
4. There is an island named 'Kya - Kya'. The natives of the island always lie while the visitors always speak truth. One fine day I saw a gorgeous lady sitting in the bar. I wanted to make her my friend so I asked the person sitting next to me to ask her was she a native or a visitor. The person came back and told that she said she was a visitor. Find out who the waiter was and who the lady was.
5. There is an island called 'Sacha - Jhoota'. The male parents always speak truth while the female parents have alternate true false statements. The kids are one step ahead, they always lie. One fine day I saw a kid on the road and asked about the kid's gender. The kid replied something in the native language. Not being able to comprehend it, I took help from the parents. The first one said "The kid says he is a boy". The other parent said, "The kid is lying. The kid is a girl ". Find the gender of the kid and who the first parent was.
6. There was a beautiful girl named Aishwarya sitting in a room with 4 of her friends, Salman, Vivek, Abhishek and Shahrukh. Suddenly one of them kissed her, not being able to notice the person she went to complain about it to her father Amitabh. While interrogating, Amitabh called each one of them. Salman said "Vivek did it". Vivek said "Abhishek did it". Abhishek said, "Vivek is lying" and finally Shahrukh said, "I did not do it". Finally it was found out that only one of them was speaking the truth. Find out who kissed her.
7. Four teams named Delhi Devils, Chennai Chimpanzee, Mumbai Murgas, Punjab Puntars reach the semi-finals of the IPL. One of the four teams won the tournament. Three persons Shahrukh, Preeti and Vijay had their predictions about the outcome.
Shahrukh said, "Either Delhi or Chennai will win the tournament ".
Preeti said, "Delhi will not win the tournament."
Vijay said, "Neither Chennai nor Mumbai will win the tournament."
Later on it was found out only one of them was right. Find out who won the tournament.
8. Five persons $A, B, C, D$ and $E$ ran in a race each finishing at a different place. After the race each person made a statement $A$ said, "I am not the last" B said, " $C$ is in the third" $C$ said, "E is behind A" D said, "B is in first place" E said, "D is not the first". Later on it was found that the person who finished first and second lied and the others gave a true statement. Find out who finished out?
9. One fine day the ghost Betal caught hold of the king Vikram and kept a condition that if he speaks the truth he will be hanged and if the lies he will be put to the sword and furthermore he can't keep quiet. Now king Vikram is puzzled what to do, what should he say so that he comes out safe of the situation.
10. There are 2 doors each guarded by a guard. One of the doors leads to heaven. Out of the two guards one always speaks the truth while the other always lies. You are allowed to ask only one question to one of the guards and decide which door leads to the heaven. What question will you ask?

## Solution for Q10

As we are allowed to ask only one question to only one of the guards, we cannot ask questions like, "Which is the door that leads to heaven?" As we don't know whether the person is speaking the truth or lying.

What we are supposed to do is go to any of the guards and ask him, "If I ask the other guard, whether he is guarding the door to heaven, what will he say?"

Now consider the case in which the person whom we asked the question may be speaking truth or lying. Furthermore he may or may not be guarding the door to heaven.

If the question is asked to a person who speaks the truth and is guarding the door to heaven then he knows that the other person is not guarding the door to heaven. So when we ask him about the answer of the other guard, he knows the other guard will lie and will say "yes". But as he always speaks truth he will pass on the same answer "YES"

If the question is asked to a person who speaks the truth and is not guarding the door to heaven then he knows that the other person is guarding the door to heaven. So when we ask him about other guards answer, he knows the other guard will lie and will say "No". But as he always speaks the truth he will pass on the same answer "NO"

If the question is asked to a person who lies and is guarding the door to heaven then he knows that the other person is not guarding the door to heaven. So when we ask him about other guards answer, he knows the other guard will speak truth and will say "No". But as he always lies he will change the answer and pass on the changed answer "YES"
If the question is asked to a person who always lies and is not guarding the door to heaven then he knows that the other person is guarding the door to heaven. So when we ask him about the answer of the other guard, he knows the other guard will speak truth and will say "Yes". But as he always lies he will pass on the changed answer "NO"

Hence the final conclusion is that if the final answer is "Yes" then the person whom we asked the question is guarding the door to heaven.

If the final answer is "No" then the person whom we asked the whole question is not guarding the door to heaven and the other guard is guarding the door to heaven

## Critical Reasoning (IF THEN)

Statement:
If you workout in gym, you will get body like Hritik.
The statement means, if someone works out in gym, surely the person is going to get a body likeHritik. But a person may get a body like Hritik even without working out in gym. i.e based on the statement we cannot conclude that if a person got a body like hritik, he has surely worked out in gym.
And if someone did not work out in gym that concludes the person will not get body like Hritik is also wrong
But surely we can say if a person did not get body like Hritik surely he has not worked out in gym.

## Statement: <br> If it's gold it glitters

## It means if SOMETHING IS GOLD SURELY ITS GOING TO GLITTER

BUT if something is glittering it may be gold or may not be gold.
If something is not gold still it may be glittering.
If something is not glittering surely it's not gold.

## ONLY IF

## Statement

You will top the exam only if you join Pankaj Gandhi's Academy

## Conclusion

The statement means the only way you can top the exam is by joining Pankaj Gandhi's Academy.
But it does not mean that everyone who joins the academy will top.
If someone did not join the academy that person is not going to top.
And if someone has topped, surely the person is student of the academy
STATEMENT:
If you drive under the influence of alcohol you will meet with an accident

1) santa met with accident
2) santa did not meet with an accident
3) santa was driving under the influence of alcohol
4) santa was not driving under the influence of alcohol
a) 13
b) 24
c) 42
d) 31

The statement simply means if you are driving under the influence of alcohol surely meet with an accident. But you may meet with an accident even without consuming alcohol (may because reckless driving, machine failure, etc)
Even if someone is not under the influence of alcohol, still the person may meet with an accident. But if someone is safe surely, the person is not under the influence of alcohol.
a) 13 says santa met with an accident so we can conclude that he was driving under the influence of alcohol is wrong
b) 24 says santa is safe so we can conclude that he was not driving under the influence of alcohol is true
c) 42 says santa was not driving under the influence of alcohol so we can conclude that he did not meet with an accident is wrong
d) 31 says santa was driving under the influence of alcohol so we can conclude that he is going to meet with an accident is true So, the right answers are $\mathbf{d}$ and $\mathbf{b}$

## STATEMENT:

If Munni is Mother, then she is a Female.

1) Munni is Female.
2) Munni is Mother.
3) Munni is not a Female.
4) Munni is not Mother.
a) 14
b) 41
c) 21
d) 34

The statement simply means, if munni is mothershe has to be a female. But if munni is a female, she can be a mother or she may not be a mother, we are not sure.
But we can say that if munni is a mother she is a female, and if munni is not a Mother she may be a female or she may not be a female.
a) 14 says Munni is female so we conclude that she is not a mother is wrong.
b) 41 say Munni is not a mother so we that she is a female is wrong.
c) $\mathbf{2 1}$ says Munni is a Mother so we conclude that she is a Female is True.
d) 34 says Munni is not a female so we conclude that she is not a Mother is True.

So, the right answers are cand d.

## STATEMENT:

## John will get divorced from Bipasha if and only if he marries with Bipasha.

1) John did not get divorced to Bipasha.
2) John got divorced to Bipasha.
3) John is married to Bipasha.
4) John is not married to Bipasha.
a) 31
b) 23
c) 41
d) 42

The statement simply means that if John is married to Bipasha, then there is a possibility of them getting divorced. That is they can have a divorce or they cannot have a divorce it is not sure. But if they had a divorce then they are surely married.
We can also say that if they are not divorced they can be either married or they are not married.
a) 31 says John is married to Bipasha so we conclude that John did not get divorced to Bipasha is wrong.
b) 23 says John got divorced from Bipasha, means he is married to Bipasha is true.
c) 41 says John is not married to Bipasha so we conclude that John did not get divorced from her is true.
d) 42 says John is not married to Bipasha so we conclude that John got divorced to Bipasha is wrong.
So, the right answers are band c.

## STATEMENT:

## India will progress if and only if corruption is taken out.

The Statement means unless and until India takes out corruption it will not be able to progress. But it does not guarantee that if India takes out corruption surely it will progress.

1) India progresses
2) India is not able to progress
3) Corruption is taken out
4) Corruption is not taken out

From this Statement we can say that if India is progressing then we can say that there is no corruption is there in India. But if there is no corruption in India we can say India may progress or India may not progress.

And if we say that there is corruption in India we can surely say that India will not progress.
a) 13
b) 31
c) 24
d) 42
a) 13 says India progresses so our conclusion that corruption is taken out from here is True.
b) 31 says Corruption is taken out so our conclusion that India progresses is Wrong.
c) 24 says India is not able to progress so our conclusion that Corruption is not taken out is wrong.
d) 42 says Corruption is not taken out from India so our conclusion that India is not able to progress is true.

So, the right answers are a and d.

## Exercise

1. Either Ravana is a demon, or he is a hero.
A) Ravana is a hero.
B) Ravana is a demon.
C) Ravana is not a demon.
D) Ravana is not a hero.
1) CD only
2) BA only
3) $C D$ and $B A$
4) $D B$ and $C A$
2. Whenever Rajeev uses the internet, he dreams about spiders.
A) Rajeev did not dream about spiders.
B) Rajeev used the internet.
C) Rajeev dreamt about spiders.
D) Rajeev did not use the internet.
1) $A D$ and $B C$
2) $D C$ and $A D$
3) $C B$ and $D A$
4) DA and BC
3. If I talk to my professors, then I do not need to take a pill of headache.
A) I talked to my professors.
B) I did not need to take a pill for headache.
C) I needed to take a pill for headache.
D) I did not talk to my professors.
1) $A B$ only
2) DC only
3) CD only
4) $A B$ and $C D$
4. Either Sita is sick or she is careless.
A) Sita is not sick.
B) Sita is not careless.
C) Sita is sick.
D) Sita is careless.
1) $A B$
2) $A D$
3) $B A$
4) $D A$
5. Ram gets a swollen nose whenever he eats hamburgers.
A) Ram gets a swollen nose.
B) Ram does not eat hamburgers.
C) Ram does not get a swollen nose
D) Ram eats hamburgers.
1) $A B$
2) DC
3) AC
4) $C B$
6. Either employees have no confidence in the management or they are hostile by nature.
A) They are hostile by nature.
B) They are not hostile by nature.
C) They have confidence in the management
D) They have no confidence in the management.
1) $B A$
2) $C B$
3) DA
4) $B D$
7. Whenever Ram reads late into the night, his father beats him up in the morning.
A) His father does not beat Ram.
B) Ram reads late into the night.
C) Ram reads early in the morning
D) Ram's father beats him in the morning.
1) $C D$
2) $B D$
3) $A B$
4) None of these
8. All irresponsible parents shout if their children do not cavort.
A) All irresponsible parents do not shout
B) Children cavort
C) Children do not cavort
1) $A B$
2) $B A$
3) CA
D) All irresponsible parents shout
4)All of the above
9. Either Sam is ill; or he is drunk.
A) Sam is ill
B) Sam is not ill
C) Sam is drunk
D) Sam is not drunk
1) $A B$
2) DA
3) AC
4) $C D$
10. Whenever Ram hears of a tragedy, he loses sleep.
A) Ram heard of a tragedy
B) Ram did not hear of a tragedy
C) Ram lost sleep
D) Ram did not lose sleep
1) $C A$
2) $B D$
3) DB
4) $A D$
11. Either the train is late; or it has derailed.
A) The rain is late
B) The train is not late
C) The train is derailed
D) The train is not derailed
1) $A B$
2) DB
3) CA
4) $B C$
12. When I read a horror story, I have a nightmare.
A) I read a story
B) I did not read a horror story
C) I did not have a nightmare
D) I had a nightmare
1) $C B$
2) $A D$
3) BC
4) $A C$
13. When I eat berries, I get rashes.
A) I ate berries
B) I did not get rashes
C) I did not eat berries
D) I got rashes
1) $D A \quad$ 2) $B C$
2) CB
3) None of these
14. All Government colleges are reputed colleges.
A) Don Bosco is not a reputed college.B) Don Bosco is a government college.
C) Don Bosco is not a government college.D) Don Bosco is a reputed college.
1) $B D$ and $A C$
2) $B D$ and $C A$
3) AC and DB
4) None of the options
15. All students of Stanford College and only the students of Stanford College are smart.
A) Nuke is a student of Stanford College.
B) Nuke is not a student of Stanford College.
C) Nuke is smart.
D) Nuke is not smart.
1) $B C$ and $C B$
2) $A C$ and $C A$
3) $D C$ and $C D$
4) $A D$ and $D B$
16. If Rock is late for work, he will lose half a day's pay.
A) Rock was late for work.
B) Rock was on time for work.
C) Rock lost half a day's pay.
D) Rock did not lose any pay.
1) $C A$ and $D B$
2) $B D$ and $C A$
3) AC and DB
4) None of these
17. Only if a person work's hard, he is said to be intelligent.
A) Brian works hard.
B) Brian does not work hard.
C) Brian is intelligent.
D) Brian is not intelligent.
1) $A C$ and $D B$
2) $C A$ and $B D$
3) CA and DB
4) $A C$ and $B D$
18. Either the orangutan is not angry, or he frowns upon the world.
A) The orangutan frowns upon the world.
B) The orangutan is not angry.
C) The orangutan does not frown upon the world.
D) The orangutan is angry.
1) $C B$ and $A D$
2) DA and BC
3) $B C$ and $A D$
4) $C B$ and $D A$

## SOLUTIONS

| $1 .(4)$ | $2 .(1)$ | $3 .(4)$ | $4 .(2)$ | $5 .(4)$ | $6 .(4)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $7 .(2)$ | $8 .(1)$ | $9 .(2)$ | $10 .(3)$ | $11 .(4)$ | $12 .(1)$ |
| $13 .(2)$ | $14 .(1)$ | $15 .(2)$ | $16 .(3)$ | $17 .(2)$ | $18 .(4)$ |

## CRITICAL REASONING (Higher Level)

Each of the critical reasoning questions is based on a short argument, a set of statements, or a plan of action. For each question, select the best answer of the choices given.

1. Which of the following, if true, most logically completes the argument below?
"Manufacturer's are now required to make all cigarette lighters child-resistant by equipping them with safety levers. But this change is unlikely to result in a significant reduction in the number of fires caused by children playing with lighters, because children given the opportunity can figure out how to work the safety levers and
(A) The addition of the safety levers has made lighters more expensive than they were before the requirement was instituted
(B) Adults are more likely to leave child-resistant lighters than non-child-resistant lighters in places that are accessible to children
(C) Many of the fires started by young children are quickly detected and extinguished by their parents
(D) Unlike child-resistant lighters, lighters that are not child-resistant can be operated by children as young as two years old
(E) Approximately 5,000 fires per year have been attributed to children playing with lighters before the safety levers were required
2. A cost-effective solution to the problem of airport congestion is to provide high speed ground transportation between major cities lying 200 to 500 miles apart. The successful implementation of this plan would cost far less than expanding existing airports and would also reduce the number of ${ }_{t}$ airplanes clogging both airports and airways.
Which of the following, if true, could proponents of the plan above most appropriately cite as a piece of evidence for the soundness of their plan?
(A) An effective high-speed ground-transportation system would require major repairs to many highways and mass-transit improvements.
(B)One-half of all departing flights in the nation's busiest airport head for a destination in a major city 225 miles away.
(C)The majority of travellers departing from rural airports are flying to destinations in cities over 600 miles away.
(D)Many new airports are being built in areas that are presently served by high-speed ground- transportation systems.
(E) Large proportion of air travellers are vacationers who are taking long-distance flights.
3. People's television-viewing habits could be monitored by having television sets, when on, send out low-level electromagnetic waves that are reflected back to the sets. The reflected waves could then be analyzed to determine how many persons are within the viewing area of the sets. Critics fear adverse health effects of such a monitoring system, but a proponent responds, "The average dose of radiation is less than one chest x-ray. As they watch, viewers won't feel a thing."
Which of the following issues would it be most important to resolve in evaluating the dispute concerning the health effects of the proposed system?
(A)Whether the proposed method of monitoring viewership can distinguish between people and pets
(B)Whether radar speed monitors also operate on the principle of analyzing reflected waves of electromagnetic radiation
(C)Whether the proposed system has been tried out in various areas of the country or in a single area only
(D)What uses are foreseen for the viewership data.
(E)Whether the average dose that the proponent describes is a short-term dose or a lifetime cumulative dose.
4. Since the mayor's publicity campaign for Greenville's bus service began six months ago, morning automobile traffic into the midtown area of the city has decreased 7 percent. During the same period, there has been an equivalent rise in the number of persons riding buses into the midtown area. Obviously, the mayor's publicity campaign has convinced many people to leave their cars at home and ride the bus to work.
Which of the following, if true, casts the most serious doubt on the conclusion drawn above?
(A)Fares for all bus routes in Greenville have risen by an average of 5 percent during the past six months.
(B)The mayor of Greenville rides the bus to City Hall in the city's midtown area.
(C)Road reconstruction has greatly reduced the number of lanes available to commuters in major streets leading to the midtown area during the past six months.
(D)The number of buses entering the midtown area of Greenville during the morning hours is exactly the same now as it was one year ago.
(E)Surveys show that long time bus riders are no more satisfied with the Greenville bus service than they were before the mayor's publicity campaign began.
5. Patrick usually provides child care for six children. Parents leave their children at Patrick's house in the morning and pick them up after work. At the end of each workweek, the parents pay Patrick at an hourly rate for the child care provided that week. The weekly income Patrick receives is usually adequate but not always uniform, particularly in the winter, when children are likely to get sick and be unpredictably absent.
Which of the following plans, if put into effect, has the best prospect of making Patrick's weekly income both uniform and adequate?
(A) Pool resources with a neighbour who provides child care under similar arrangements, so that the two of them cooperate in caring for twice as many children as Patrick currently does. (B)Replace payment by actual hours of child care provided with a fixed weekly fee based upon the number of hours of child care that Patrick would typically be expected to provide.
(C)Hire a full-time helper and invest in facilities for providing child care to sick children.
(D)Increase the hourly rate to a level that would provide adequate income even in a week when half of the children Patrick usually cares for are absent.
(E)Increase the number of hours made available for child care each day, so that parents can leave their children in Patrick's care for a longer period each day at the current hourly rate.
6. A researcher discovered that people who have low levels of immune-system activity tend to score much lower on tests of mental health than do people with normal or high immunesystem activity. The researcher concluded from this experiment that the immune system protects against mental illness as well as against physical disease.
The researcher's conclusion depends on which of the following assumptions?
(A)High immune-system activity protects against mental illness better than normal immunesystem activity does.
(B)Mental illness is similar to physical disease in its effects on body systems.
(C)People with high immune-system activity cannot develop mental illness.
(D)Mental illness does not cause people's immune- system activity to decrease.
(E)Psychological treatment of mental illness is not as effective as is medical treatment.
7. In parts of South America, vitamin-A deficiency is a serious health problem, especially among children. In one region, agriculturists are attempting to improve nutrition by encouraging farmers to plant a new variety of sweet potato called SPK004 that is rich in beta- carotene, which the body converts into vitamin A. The plan has good chances of success, since sweet potato is a staple of the region's diet and agriculture, and the varieties currently grown contain little beta-carotene. Which of the following, if true, most strongly supports the prediction that the plan will succeed?
(A)The growing conditions required by the varieties of sweet potato currently cultivated in the region are conditions in which SPK004 can flourish.
(B)The flesh of SPK004 differs from that of the currently cultivated sweet potatoes in colour and texture, so traditional foods would look somewhat different when prepared from SPK004.
(C)There are no other varieties of sweet potato that are significantly richer in beta-carotene than SPK004 is.
(D)The varieties of sweet potato currently cultivated in the region contain some important nutrients that are lacking in SPK004.
(E)There are other vegetables currently grown in the region that contain more betacarotene than the currently cultivated varieties of sweet potato do.
8. Shelby Industries manufactures and sells the same gauges as Jones Industries. Employee wages account for 40 percent of the cost of manufacturing gauges at both Shelby Industries and Jones Industries. Shelby Industries is seeking a competitive advantage over Jones Industries. Therefore, to promote this end, Shelby Industries should lower employee wages. Which of the following, if true, would most weaken the argument above?
(A)Because they make a small number of precision instruments, gauge manufacturers cannot receive volume discounts on raw materials.
(B)Lowering wages would reduce the quality of employee work, and this reduced quality would lead to lowered sales.
(C) Jones Industries has taken away 20 percent of Shelby Industries' business over the last year.
(D) Shelby Industries pays its employees, on average, 10 percent more than does Jones Industries.
(E) Many people who work for manufacturing plants live in areas in which the manufacturing plant they work for is the only industry.
9. Large national budget deficits do not cause large trade deficits. If they did, countries with the largest budget deficits would also have the largest trade deficits. In fact, when deficits figures are adjusted so that different countries are reliably comparable to each other, there is no such correlation. If the statements above are all true, which of the following can properly be inferred on the basis of them?
(A) Countries with large national budget deficits tend to restrict foreign trade.
(B)Reliable comparisons of the deficit figures of one country with those of another are impossible.
(C)Reducing a country's national budget deficit will not necessarily result in a lowering of any trade deficit that country may have.
(D)When countries are ordered from largest to smallest in terms of population, the smallest countries generally have the smallest budget and trade deficits.
(E)Countries with the largest trade deficits never have similarly large national budget deficits.
10. Which of the following most logically completes the argument? The last members of a now-extinct species of a European wild deer called the giant deer lived in Ireland about 16,000 years ago. Prehistoric cave paintings in France depict this animal as having a large hump on its back. Fossils of this animal, however, do not show any hump. Nevertheless, there is no reason to conclude that the cave paintings are therefore inaccurate in this regard, since
(A) some prehistoric cave paintings in France also depict other animals as having a hump
(B) fossils of the giant deer are much more common in Ireland than in France
(C) animal humps are composed of fatty tissue, which does not fossilize
(D) the cave paintings of the giant deer were painted well before 16,000 years ago
(E) only one currently existing species of deer has any anatomical feature that even remotely resembles a hump
11. The sustained massive use of pesticides in farming has two effects that are especially pernicious. First, it often kills off the pests' natural enemies in the area. second ,it often unintentionally gives rise to insecticide-resistant pests, since those insects that survive a particular insecticide will be the ones most resistant to it, and they are the ones left to breed. From the passage above, it can be properly inferred that the effectiveness of the sustained massive use of pesticides can be extended by doing which of the following, assuming that each is a realistic possibility?
(A)Using only chemically stable insecticides
(B)Periodically switching the type of insecticide used
(C)Gradually increasing the quantities of pesticides used
(D)Leaving a few fields fallow every year
(E)Breeding higher-yielding varieties of crop plants
12. In an attempt to promote the widespread use of paper rather than plastic, and thus reduce non-biodegradable waste, the council of a small town plans to ban the sale of disposable plastic goods for which substitutes made of paper exist. The council argues that since most paper is entirely biodegradable, paper goods are environmentally preferable. Which of the following, if true, indicates that the plan to ban the sale of disposable plastic goods is ill suited to the town council's environmental goals?
(A)Although biodegradable plastic goods are now available, members of the town council believe biodegradable paper goods to be safer for the environment.
(B)The paper factory at which most of the townspeople are employed plans to increase production of biodegradable paper goods.
(C)After other towns enacted similar bans on the sale of plastic goods, the environmental benefits were not discernible for several years.
(D)Since most townspeople prefer plastic goods to paper goods in many instances, they are likely to purchase them in neighbouring towns where plastic goods are available for sale.
(E)Products other than those derived from wood pulp are often used in the manufacture of paper goods that are entirely biodegradable.
13. A major health insurance company in Lagolia pays for special procedures prescribed by physicians only if the procedure is first approved as "medically necessary" by a company appointed review panel. The rule is intended to save the company the money it might otherwise spend on medically unnecessary procedures. The company has recently announced that in order to reduce its costs, it will abandon this rule. Which of the following, if true, provides the strongest justification for the company's decision?
(A) Patients often register dissatisfaction with physicians who prescribe nothing for their ailments.
(B) Physicians often prescribe special procedures that are helpful but not altogether necessary for the health of the patient,
(C)The review process is expensive and practically always results in approval of the prescribed procedure.
(D)The company's review process does not interfere with the prerogative of physicians, in cases where more than one effective procedure is available, to select the one they personally prefer.
(E)The number of members of the company- appointed review panel who review a given procedure depends on the cost of the procedure.
14. Unlike the wholesale price of raw wool, the wholesale price of raw cotton has fallen considerably in the last year. Thus, although the retail price of cotton clothing at retail clothing stores has not yet fallen, it will inevitably fall. Which of the following, if true, most seriously weakens the argument above?
(A)The cost of processing raw cotton for cloth has increased during the last year."
(B)The wholesale price of raw wool is typically higher than that of the same volume of raw cotton.
(C)The operating costs of the average retail clothing store have remained constant during the last year.
(D)Changes in retail prices always lag behind changes in wholesale prices.
(E)The cost of harvesting raw cotton has increased in the last year.
15. Start-up companies financed by venture capitalists have a much lower failure rate than companies financed by other means. Source of financing, therefore, must be a more important causative factor in the success of a start-up company than are such factors as the personal characteristics of the entrepreneur, the quality of strategic planning, or the management structure of the company.
Which of the following, if true, most seriously weakens the argument above?
(A) Venture capitalists tend to be more responsive than other sources of financing to changes in a start-up company's financial needs.
(B)The strategic planning of a start-up company is a less important factor in the long-term success of the company than are the personal characteristics of the entrepreneur.
(C)More than half of all new companies fail within five years.
(D)The management structures of start-up companies are generally less formal than the management structures of ongoing businesses.
(E)Venture capitalists base their decisions to fund start-up companies on such factors as the characteristics of the entrepreneur and quality of strategic planning of the company.

## Series Completion

1. $5,10,9,3,6,5,4,8,7,7$, ?
2. $1,9,0,2,7,1,3,5,2,4$ ?
3. $1,2,3,6,11,20,37$, ?
4. $56,89,33,21,57,88,35,19,60,85,39,15$, ?
5. $5,1,2,8,8,1,0,9,9,2,3$ ? ?
6. $49,6,25,4,36,5,81$, ?
7. $15 \frac{3}{4}, 16,26,9 \frac{1}{5}, 9,19,64 \frac{2}{3}$, ?
8. $3,4.5,7,4,6,8.5,5,7.5,10,6$, ?
9. $4,2,5,9,5,11,13,7,16,17,9$ ?
10. $5,6,6.5,6.5,8,7,9.5$, ?
11. $9,4,16,6,36,21,441$, ?
12. $1,1,1,2,2,2,3,4,3,3,5,6$, ?
13. $9,12,4,8,12,15,5,9,3,6,2$, ?
14. $2,6,5,14,11,26,17$, ?
15. $7.2,2.2,3.2,16,11,12,60,55,56$, ?
16. $2.5,3,7.1,1.5,1,8.1,0.5,-1,9.1$, ?
17. $11,8,17,14,23,24,31,32$, ?
18. $3.4,9.3,4,9.8,4.6,10.3,5.2,10.8$, ?
19. $-23,-16,18,14,-52,-45,37,33,-65$, ?
20. $1,3,4,5,13,2,3,4,22,1,2,3$ ? ?
21. $38,36,76,35,114,34$, ?
22. $175,94,188,124,372,323,1298$, ?
23. $4.2,26.0,8.9,8.4,52.0,17.8,16.8,104.0$ ?
24. $1,1,1,2,4,12,36$, ?
25. $8,16,3,27,4,8,7,19,2,0,7$, ?
26. $49,7,84,16,4,48,9,3,36,25,5$ ?
27. $100,98,95,90,83$,?
28. $3,5,2,100,4,7,3,196,1,6,5$, ?
29. $8,5,9,7,2,25,5,1,16,8,6$, ?
30. $34,4,21,59,43,3,20,66,12,2,16$, ?
31. $1,3,1,2.5,5,1,4,5,4,8,7$, ?
32. $-5,1,-11,23,29,17,-20,-14$, ?
33. $-3,-4,-9,-28$, ?
34. $5,10,25,15,30,75,150,80,155,400$, ?
35. $4,2,36,4,5,1,36,16,6,3,81$, ?
36. $16 \frac{1}{2}, 17.5,15.5,18 \frac{1}{2}, 141 / 2,191 / 2,13.5,201 / 2$, ?
37. $2,7,-35,7,12,-60,5,10$, ?
38. $0,1,2,3,0,3,1,4,0,2,5$, ?
39. $2^{2}, 2^{3}, 2^{-1}, 8^{4}, 8^{7}, 8^{-3}, 11^{5}, 11^{3}, 11^{2}, 14^{6}, 14^{9}$, ?
40. $22,99,34,21,101,31,18,104,28,13$, ?
41. $3,4,12,6,1,8,8,4,5,6$, ?
42. $7,-35,-34,-3,15,16,4$, ?
43. $44,4.4,0.88,0.264,0.1056$, ?
44. $0.7,1.2,1.2,2.2,1.7,3.2,2.2,4.2$ ?
45. $1,1,3,9,11,121$, ?
46. $2,1,2,4,8,2,16,0.5,8,3 / 4$, ?
47. $11.5,17.5,35.5,89.5$, ?
48. $10,12,-36,-7,-5,15,19,21$, ?
49. $24,42,1 / 2,2,65,56,11 / 5,5 / 6,73,37, ?$
50. $34.274,34.2744,34.2784,34.3184,34.7184$, ?
51. $5,6,6.5,7.5,8.5,9.5$, ?
52. $12,16,24,40$, ?
53. $9,19,39,79$, ?
54. $8,17,42,91$, ?
55. $7,8,18,57$, ?
56. $3840,960,240,60$,?
57. $50,57,63,68$, ?
58. $2,5,14,41$, ?
59. $7,21,42,70$, ?
60. $416,525,636,749$, ?
61. $83,73,67,59,47$, ?
62. $2,8,14,26,38,56$, ?
63. $3,5,6,8,11,13$, ?
64. $15015,5005,1001, ?, 13,1$
65. 290, 289, 17, 16, 4, ?
66. $40,41,9,12,13,5,24, ?, 7$
67. $4,10,22,46,94$, ?
68. $4,13,40,121$, ?
69. $5,8,14,26,50$, ?
70. $23,35,57,711$, ?
71. $13,35,57,79,911$,?
72. $4,6,9,14,21,32$ ?
73. $3,5,9,16,28$, ?
74. $2,5,11,17,23$,?
75. $0,2,3,5,8,10,15$, ?
76. $1,5,7,14,18,20,40,44,46$, ?
77. $2,5,9,10,13,17,18,21,25$, ?
78. $2,3,10,26,72$, ?
79. $14,60,28,45, ?, 30,56$
80. $1 / 81,1 / 54,1 / 36,1 / 24$,?
81. $5,9,6,11,7$, ?
82. $7,15,29,59,117$ ?
83. $17,19,15,23,7,39$, ?
84. $3,2,6,8,18,40,72,240$, ?
85. $23,32,49,94,73$, ?
86. $2,6,14,30,62$, ?
87. $8,9,8,7,10,9,6,11,10, ?, 12$
88. $4,11,7,14,10,17$, ?
89. $3,8,22,63,185$, ?
90. $24,48,80,120$, ?
91. $0.50,0.33,0.25,0.20,0.16$,?
92. $336,210,120, ?, 24,6,0$
93. $1,3,3,6,7,9, ?, 12,21,15$
94. $6,8,9,12,14,18, ?, 26,30$
95. $3,22,51,90,139$, ?
96. $1,2,4,10,16,40,64$, ?, ?
97. $3125,256,27,4$, ?
98. $1,2,3,7,22,155$, ?
99. $1,2,3,8,27$, ?
100. $283,505, ?, 1282,1837,2503$
101. $7,36,125,256, ?, 64,1$
102. 5, 6, ?, 87, 412, 2185
103. $60,20, ?, 15,60,12$
104. $2,5,17.5,43.75$, ?
105. $12,16,24,36,52$, ?
106. 17, 21, 37, 73, 137,?
107. $620,412,308,256,230$, ?
108. $495,485,465,425,345$, ?
109. $16,22,33,49,70$, ?
110. $32,36,52,88,152$, ?
111. $17,289,425,493,527$, ?
112. $13,27,55,97,153$, ?
113. $1,1,6,6,11,11,16, ?$ ?
114. $6341,5432, ?, 3614$
115. $2,6,30,60,130$,?

## SEQUENTIAL OUTPUTTING

## Directions (Question 1 to 5): Study the following information and answer the questions given below it:

A word arrangement machine, when given an input line of words, rearranges them following a particular rule in each step. The following is an illustration of input and the steps of rearrangement.

Input: Munni Badnaam hui Darling tere liye.
As to maintain the privacy or the secrecy of the movie Dabaang from the media or other competitors the reels of the movie were kept in a locker whose password was changed or altered in a sequential manner in every hour, in six hours of shoot. That means the password of the locker is altered six times.
The initial password was the input as stated above, and the altered password of every hour for six hours is as follow:

Hour 1: Munni Badnaam hui Darling tere liye
Hour 2: Hui Munni Badnaam liye Darling tere
Hour 3: Badnaam hui Munni Darling tere liye
Hour 4: Darling hui Badnam Munni tere liye
Hour 5: Liye Munni Darling hui Badnam tere
Hour 6: Badnam Munni Darling hui tere liye

1. If the input is given "Chura liya hai tumne jo dilko". Which will be the output for Hour 5 ?
a) dilko tumne chura liya jo hai
b) dilko chura tumne hai liya jo
c) dilko hai tumne chura jo liya
d) none of these
2. If the input is given "Dum maro dum mit jaye gum". Which will be the output for hour 3 ?
a) mit dum maro Dum jaye gum
b) maro dum Dum mit jaye gum
c) maro Dum dum mit jaye gum
d) dum maro mit dum jaye gum
3. If the output at hour 4 is "Paraya japna naam Ram maal apna". Which will be the input at hour 1?
a) japna Ram naam apna Paraya maal
b) naam japna Ram Paraya maal apna
c) Ram naam japna Paraya maal apna
d) none of these
4. If the input is "Andheri raat me Diya hath me". Which step will give the output "diya me raat Andheri hath me"?
a) Hour 3
b) Hour 5
c) Hour 4
d) Hour 6
5. If the input is "Aao sikhaye tumhe ande ka funda". Which will be the output at hour 5 ?
a) funda Aao ande tumhe sikhaye ka
b) funda Aao ande sikahye tumhe ka
c) Aao funda ande tumhe ka sikhaye
d) none of these

Directions (Question 6 to 10): Study the following information and answer the questions given below it:

A word arrangement machine, when given an input line of words, rearranges them following a particular rule in each step. The following is an illustration of input and the steps of rearrangement.

Input: Academy to go the Pankaj Gandhi
Step 1: go Academy to the Pankaj Gandhi
Step 2: go to Academy the Pankaj Gandhi
Step3: go to the Academy Pankaj Gandhi
Step 4: go to the Gandhi Academy Pankaj
Step 5: go to the Gandhi Pankaj Academy
6. If the input given is "All girls like to look smart". Which will be the step 3 of the input given?
a) to all like girls look smart
b) to all like look girls smart
c) to all girls like look smart
d) None of these
7. If the input given is "That all glitter is not gold". Which will be the last step of the input given?
a) Step 1
b) Step 3
c) Step 4
d) Step 2
8. If the step 3 of the input is "All are not Red flower Roses". Which will be the Step 1 of the input given?
a) All are not Red Roses flowers
b) All are flowers not Red Roses
c) All are not Red flowers Roses
d) Cannot be determined
9. If the input given is "A stitch in time saves nine". Which will be the last but second step of the input?
a) Step 3
b) Step 1
c) Step 2
d) None of these
10. If the input is given "If I had to live my life without you". Which will be the last step of the input given?
a) Step 2
b) Step 6
c) Step 4
d) Step 5

## Directions (Question 11 to 15): Study the following information and answer the questions given below it:

A new sorting algorithm is devised by Mr. Chintu Gates. It is helpful to arrange the numbers in a particular pattern when given a sequence of numbers as input. The following is an illustration of input and the steps of rearrangement.

| Input: 65 | 37 | 45 | 74 | 15 | 188 | 22 | 215 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Step 1: 215 | 65 | 37 | 45 | 74 | 15 | 188 | 22 |
| Step 2: 215 | 65 | 37 | 45 | 74 | 188 | 22 | 15 |
| Step 3: 215 | 188 | 65 | 37 | 45 | 74 | 22 | 15 |
| Step 4: 215 | 188 | 65 | 45 | 74 | 37 | 22 | 15 |
| Step 5: 215 | 188 | 74 | 65 | 45 | 37 | 22 | 15 |

11. If the input given was $79,123,55,89,129,37$. Which step will be the last step of the input?
a) Step 1
b) Step 3
c) Step 4
d) Step 5
12. If the given input is: $13,75,62,18,07,21,99$. What will be the Step 5 of the input?
a) $99,13,75,62,18,07,21$
b) $99,13,75,62,18,21,07$
c) $99,75,62,18,21,13,07$
d) $99,75,62,21,18,13,07$
13. If the input given was $35,17,01,45,37,09$. Which will be the last step of the input?
a) Step 4
b) Step 3
c) Step 2
d) Step 5
14. If the given input is: $176,225,89,75,121$. Which will be the last but one step of the input?
a) Step 2
b) Step 3
c) Step 1
d) Step 4
15. If the step 4 of the input is $375,301,188,221,120,75,33$. What was the first step of the input given?
a) $188,221,75,33,375,120,301$
b) $221,75,33,301,120,188,375$
c) $375,221,188,129,301,33,75$
d) cannot be determined

## Directions (Question 16 to 20): Study the following information and answer the questions given below it:

A new sorting algorithm is devised by Mr. It is helpful to arrange a given sequence the numbers and words in a particular pattern.

Input : Sachin 26 Kapil Sunil 92 Kris 78 Mahi 62 Anil 5038
Step 1: 92 Sachin 26 Kapil Sunil Kris 78 Mahi 62 Anil 5038
Step 2:92 Anil Sachin 26 Kapil Sunil Kris 78 Mahi 625038
Step 3: 92 Anil 78 Sachin 26 Kapil Sunil Kris Mahi 625038
Step 4: 92 Anil 78 Kapil Sachin 26 Sunil Kris Mahi 625038
Step 5:92 Anil 78 Kapil 62 Sachin 26 Sunil Kris Mahi 5038
Step 6:92 Anil 78 Kapil 62 Kris Sachin 26 Sunil Mahi 5038
Step 7: 92 Anil 78 Kapil 62 Kris 50 Sachin 26 Sunil Mahi 38
Step 8 : 92 Anil 78 Kapil 62 Kris 50 Mahi Sachin 26 Sunil 38
Step 9:92Anil 78 Kapil 62 Kris 50 Mahi 38 Sachin 26 Sunil
Step 9 is the last step .
16. If the input given is 11 Tulip 3375 Rose 42 Jasmine Marigold 98 Lotus which will be the last step of the input?
a) Step 7
b) Step 8
c) Step 9
d) Step 10
17. If the input given is 75 Pineapple 95 Mango 33 Coconut 99 Vanilla 42 Chocolate which will be the seventh step of the output?
a) 99 Chocolate 95 Coconut 75 Mango 42 Pineapple 33 Vanilla
b) 99 Chocolate 95 Coconut 75 Mango 42 Pineapple Vanilla 33
c) 99 Chocolate 95 Coconut 75 Mango 4233 Vanilla Pineapple
d) There will be no such step
18. If the input given is 84 Pune Mumbai 112 Aurangabad Ahmedabad 5644 Bangalore 100 which will be the last step of the input?
a) Step 6
b) Step 7
c) Step 8
d) Step 9
19. If the Step 5 of an input is, 81 Biology 64 Botany 49 Maths 36 Chemistry 44 Physics which of the following can be the possible input?
a) Biology 44 Physics 81 Chemistry 36 Maths 49 Botany 64
b) Biology 49 Botany 8164 Maths 36 Chemistry 44 Physics
c) Maths 36 Chemistry 44 Physics 648149 Botany Biology
d) Cannot be determined
20. If the input given was, Chameli Munni 27 Sheila 8918 Jalebi Pinky 8 28, which step will be

89 Chameli 28 Jalebi 27 Munni Sheila 18 Pinky 8 ?
a) Step 3
b) Step 4
c) Step 5
d) None of these

Directions (Question 21 to 25): Study the following information and answer the questions given below it:

Input: Malaysia Hawai Goa Macau Duabi Singapore Hongkong Istanbul Zurich Kashmir LasVegas

Step 1: Malaysia Singapore Hawai Goa Macau Duabi Hongkong Istanbul Zurich Kashmir LasVegas

Step 2: Malaysia Singapore Dubai Hawai Goa Macau Hongkong Istanbul Zurich Kashmir LasVegas

Step 3: Malaysia Singapore Dubai Hawai Istanbul Goa Macau Hongkong Zurich Kashmir LasVegas

Step 4: Malaysia Singapore Dubai Hawai Istanbul LasVegasGoa Macau Hongkong Zurich Kashmir

Step 5: Malaysia Singapore Dubai Hawai Istanbul LasVegas Macau Goa Hongkong Zurich Kashmir

Step 6: Malaysia Singapore Dubai Hawai Istanbul LasVegas Macau Goa Hongkong Kashmir Zurich

Step 6 is the last step.
21. If the input given is, Mercury Venus Earth Mars Jupiter Saturn Uranus Neptune Pluto. Which will be the last step of the input given?
a) Step 6
b) Step 4
c) Step 5
d) Step 7
22. If the input given was, Chambal Ki ghati Mein Kali Ma Ka Prasad, which step will be Chambal Ghati Kali Mein Ki Ma Ka Prasad?
a) Step 2
b) Step 3
c) Step 4
d) None of these
23. If the Step 4 of an input is Fanoos Laila Neelam Nilofar Tsunami Hudhud Lehar Onil Yemyin, which of the following can be the possible input?
a) Neelam Lehar Onil Nilofar Tsunami Hudhud Laila Fanoos Yemyin
b) Tsunami Hudhud Laila Neelam Lehar Onil Nilofar Fanoos Yemyin
c) Tsunami Hudhud Laila Yemyin Neelam Onil Nilofar Fanoos Lehar
d) Can not be determined
24. If the input given is, Twitter Whatsapp Telegram Orkut Wechat Viber Instagram Facebook. Which will be the fifth step of the output?
a) Facebook Instagram Telegram Orkut Twitter Whatsapp WechatViber
b) Facebook Instagram Telegram Orkut Twitter Viber Wechat Whatsapp
c) Facebook Instagram Telegram Orkut Twitter Viber Whatsapp Wechat
d) Cannot be determined
25. If the input given is, Cricket Hockey Volleyball Badminton Polo Golf Basketball Tennis Kabaddi. Which will be the output of the given input?
a) Badminton Basketball Kabaddi Cricket Hockey Polo Tennis Volleyball Golf
b) Badminton Basketball Kabaddi Cricket Polo Hockey Volleyball Tennis Golf
c) Badminton Basketball Kabaddi Cricket Hockey Tennis Polo Volleyball Golf
d) None of these

## CODING - DECODING

1.In a certain code language MOBILE written as PRELOH, then CELLPHONE will be coded as?
a) FHOOSRQKH
b) FHOOSOHRQ
c) FHOOSKRQH
d) FHOOSQKRH
2.In certain code language MASAKALI is written as NYVWPUSA, then RANBIR will be coded as?
a) YQXSNL
b) SYQXNL
c) SYQYNL
d) YQSNXL
3.In certain code language CERTAIN is coded as DGUXFOU, then CALAMITY will be coded as?
a) DCOAGEROA
b) DCOEROAG
c) DECORGOA
d) DCOREOGA
4.In a certain language MOGAMBO is written as KLCVGUG, then SHAKTI will be coded as?
a) QEWFNB
b) QFWFNB
c) QEWGNB
d) QEWFNC
5. In a certain language KARINA is coded as ZMHQZJ, then SHAHID will be coded as?
a) CHGZER
b) EHGZGR
c) CHGZGR
d) CHIZIR
6.In a certain language BANGLORE is coded as CDIPQNGT, then YAVATMAL will be coded as?
a) CACXOWNC
b) DADXOVNC
c) CACTOVNB
d) CACXOVNC
7.In a certain language CHOCOLATE is coded as SYKMBMGAD, then LIMEJUICE will be coded as?
a) BGTHFKHJD
b) BGTHDKIJD
c) BGTHDKHJD
d) BGTHDLHJD
8. In a certain language ICECREAM is coded as ECICAMRE, then KEYBOARD will be coded as?
a) YBKERAOD
b) YBKERODA
c) ZCKERODA
d) YBKERDOA
9.In a certain language COMPLIMENT is coded as OCMPILMETN, then ATTACHMENT is coded as?
a) TATACHMETN
b) TATAHCMENT
c) TATAHCMETN
d) TAATHCMENT
10.In a certain language RECRUITMENT is coded as RRECIUETMTN, then OPPORTUNITY is coded as?
a) OOPPTRINUYT
b) OOPPTIRUNYT
c) OOPPTRIUNYT
d) OPOPTRIUNYT
11.In a certain language MUNNI is coded as 43559 , then SHEILA is coded as?
a) 185831
b) 185941
c) 185931
d) 185932
12.In a certain language COGNIZENT is coded as UPHOJAFOD, then INFOSYS is coded as?
a) TOGTPZJ
b) TOGPTZJ
c) TOGRTZJ
d) TOGPTXJ
13.In a certain language RANBIR is coded as IZMYRI, then DEEPIKA is coded as?
a) WUUKRPZ
b) WVVKRPZ
c) WVVKSPZ
d) WVVKROZ
14.In a certain language CONVENIENCE is coded as 53559554563 , then TREATMENT is coded as?
a) 255421571
b) 255432592
c) 255421592
d) 255421582
15.In a certain language PREDICTION is coded as 5732719743 , then IMAGINATION will be coded as?
a) 72757377943
b) 72757479743
c) 72757379753
d) 72757379743
16. In a certain language FORECAST is coded as STCAREFO, then ENTERPRISE will be coded as?
a) SERIRPTEEM
b) SERIRPTEEN
c) SERIRPSEEN
d) SERIRPTFFN
17. In a certain language MAJOR is coded as LNZBIKNPQS, then MINOR will be coded as?
a) LNHJMONPQS
b) LNHJMOMPQS
c) LNHJNONPQS
d) LNHJONNPQS
18. In a certain language SIMPLE is coded as DLHKOR, then COMPOUND will be coded as?
a) CLNNMOTB
b) CLNNOMBT
c) CLNNOMTB
d) CMNNOMTB
19.In a certain language DIAMOND is coded as EBDHBBB, then PLATINUM will be coded as?
a) HEDFEBAC
b) HEDEEBBC
c) HECFEBAC
d) HEDFEBJD
20. In a certain language DHANNO is coded as FDGFXC, then BASANTI is coded as?
a) DWYSXIW
b) DWYSXHW
c) DWYSYHW
d) DWZSXHW
21.In a certain language CORPORATIONS is coded as PROCTAROSNOI, then JUDICIAL will be coded as?
a) IDUJLAIC
b) UJIDLAIC
c) UJIDICLA
d) IDUJICLA
22.In a certain code language, BLUE is called YELLOW, YELLOW is called GREEN,GREEN is called RED, RED is called PINK, PINK is called MAGENTA and MAGENTA is called BLUE, then what is the colour of blood?
a) BLUE
b) GREEN
c) RED
d) PINK
23.In a certain language, MOGAMBO KHUSH HUA is written as ABRA KA DABRA,MOGAMBO IS JAWAAN is coded ABRA IS BAD and PAPPU JAWAN HUA is coded as DABRA IS GOOD. How willPAPPU KHUSH HUA will be coded?
a) DABRA KA GOOD
b) ABRA KA GOOD
c) DABRA IS BAD
d) MOGAMBO IS BAD
24.In a certain language, CHIN CHU CHA CHE stands for the statement CHILLY IS VERY INTELLIGENT, CHU CHIN RIN DIN for GOLDY IS VERY SMART, CHA CHIN MIN for DOG IS INTELLIGENT, and CHA DIN KIN for SMART AND INTELLIGENT. Which of the following words stands for GOLDY?
a) CHU
b) CHIN
c) DIN
d) RIN

## Cube Cutting

1. A cube is painted on all its six surfaces and is cut into 27 smaller cubes. Out of the smaller cubes formed, how many cubes will have.
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
2. A cuboid of length 7 cm , breadth 6 cm and height 5 cm is painted on opposite surfaces in red, green and white colour and is cut into smaller cube of side 1 cm each. Out of the smaller cubes formed, how many cubes will have
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
3. A cube is painted on all the six surfaces and is cut into 3 layers. The first layer is cut into 4 smaller cubes. The second layer is cut into 9 smaller cubes and third into 16 smaller cubes. How many of the smaller cubes will have,
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
4. A cube is cut into 125 smaller cubes and from each surface middle cube is removed and now the remaining structure is painted. Out of the smaller cubes formed, how many cubes will have,
(a)3 sides coloured
(c) 1 side coloured
(b)2 sides coloured
(d) 0 sides coloured
5. 2 cubes of equal size are joined in a straight line. One of them is cut into 64 and other into 125 smaller cubes. Now the four corner columns of structure are removed and remaining structure is painted. Out of the smaller cubes formed, how many cubes will have
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
6. Three cubes of equal size are joined in a straight line. Each of them is cut into 64 smaller cubes. The top layer of $2^{\text {nd }}$ cube is removed and the top two layers of $3^{\text {rd }}$ cube are removed. And the remaining structure is painted. Out of the smaller cubes formed, how many cubes will have
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
7. There are four cubes they are joined together two in each row and the structure is painted one of the cubes is cut into 27 smaller cubes the other into 64 , the third into 125 and the fourth into 216 smaller cubes. Out of the smaller cubes formed how many will have
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
8. A cube is cut into 125 smaller cubes and the eight corner cubes are removed and the remaining structure is painted. Out of the smaller cubes formed, how many cubes will have
(a) 3 sides coloured
(c) 1 side coloured
(b) 2 sides coloured
(d) 0 sides coloured
9. A cube is cut into 27 smaller cubes of equal size. One of the corner cubes out of these cubes is cut again into 27 smaller cubes of equal size. From this cube from the top two corner edges the middle cube is taken out and the remaining structure is painted out of the total cubes formed how many will have
(a) 3 sides coloured
(d) 1 side coloured
(b) 2 sides coloured
(e) 0 sides coloured
(c) More than 3 sides coloured
10. A cube is cut into 27 smaller cubes of equal size. One of the corner cubes out of these cubes is cut again into 27 smaller cubes of equal size. From this cube from the three visible surfaces the middle cube is removed and the remaining structure is painted out of the total cubes formed how many will have
(a) 3 sides coloured
(d) 1 side coloured
(b) 2 sides coloured
(e) 0 sides coloured
(c) More than 3 sides coloured

## Points To Remember:

If a cube is painted on all the six surfaces and is cut in each direction (length, breadth ,height ) in $\mathbf{n}$ parts then

Number of cubes with three sides coloured $=8$
Number of cubes with two sides coloured $=(\mathbf{n - 2}) * 12$
Number of cubes with one side coloured $=(n-2)^{2} * 6$
Number of cubes with zero sides coloured $=(\mathbf{n - 2})^{3}$
E.g .A cube is painted on all its six surfaces and is cut into 27 smaller cubes. Out of the smaller cubes formed, how many cubes will have.

Number of cubes with three sides coloured = 8
Number of cubes with two sides coloured =(3-2)*12=12
Number of cubes with one side coloured $=(3-2)^{2} * 6=6$
Number of cubes with zero sides coloured $=(3-2)^{3}=1$


## DATA SUFFICIENCY - Level 1

Directions: Each of the questions below consists of a question and two statements numbered I and II are given below it. You have to decide whether the data provided in the statements are sufficient to the answer question. Read both the statements and
Give Answer (1): If the data in Statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
Give Answer (2): If the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
Give Answer (3): If the data in Statement I alone or Statement II alone are sufficient to answer the question.
Give Answer (4): If the data in both the Statements I and II are not sufficient to answer the question.
Give Answer (5): If the data in both the Statements I and II together are necessary to answer the question.

1. What is the code for 'sky' in the code language?
I. In a code language 'sky is clear' is written as 'de ra fa'.
II. In the same code language 'make it clear' is written as 'de ga jo'.
2. How is Mohan related to Divya?
I. Mohan is the only son of Divya's mother - in - law.
II. Rani is Mohan's only sister.
3. Village ' $R$ ' is in which directions with respect to village ' $D$ '?
I. Village ' $R$ ' is to the North of Village ' $T$ ' which is to the West of village ' $F$ '.
II. Village ' $D$ ' is to the West of village ' $T$ '.
4. How many children does ' $M$ ' have?
I. ' $H$ ' is the only daughter of ' $X$ ' who is wife of ' $M$ '.
II. K and J are brothers of H .
5. What is sunil's rank from the top in a class of 25 students?
I. Sunil ranks three ranks above Sudhir who ranks $18^{\text {th }}$ from the bottom.
II. Sunil's rank from the top is two ranks below sheela who ranks $23^{\text {rd }}$ from the bottom.
6. How is ' $P$ ' related to ' $Q$ '?
I. Mother of ' $P$ ' is daughter of ' $R$ '.
II. ' $R$ ' is sister of ' $Q$ '.
7. Among five friends $A, B, C, D$ and $E$ who is the youngest?
I. $B$ and $D$ are older than $C$ and $E$.
II. C is older than only E .
8. Tower $R$ is in which direction with respect to $Q$ ?
I. $M$ is to the East of $Q$ and to the North of R.
II. $L$ is to the West of $R$ and to the South of $Q$.
9. How many children are there in the row of children facing north?
I. Kavitha is twelfth from the left end of the row and is seventh to the right of Nisha.
II. Nisha is twentieth from the right end of the row.
10. How many sons does ' $D$ ' have?
I. $R$ is the only sister of $T$ and $M$ who are sons of $D$.
II. T and $M$ are only brothers of $R$ who is daughter of $D$.
11. In how many days 12 men can complete a piece of work?
I. If 12 children can complete the same piece of work in 36 days.
II. If 12 women can complete the same piece of work in 24 days.
12. What is the three digit number?
I. Three digit number is a prime number.
II. The first and third digit is 7 .
13. What is the profit earned by selling a calculator for Rs. 560 ?
I. The cost price of 4 such calculators is equal to selling price of 3 such calculators.
II. One - third amount of cost price is earned as profit.
14. The ages of Aashima and Apsara are in the ratio of $9: 8$. What is the age of Aashima? I. The ages of Aashima and Arpita are in the ratio of $3: 2$.
II. After 6 years the ratio of Aashima's and Apsara's age will be 11: 10 .
15. Is $B$ an odd number ( $B$ is a natural number )?
I. B multiplied by an odd number is an odd number.
II. $B$ is not divisible by 2 .
16. How long does it take to reach city ' $Y$ ' from city ' $x$ '?
I. Sangita was scheduled to leave the city ' $X$ ' at 17.15 h but got late by 45 min and reached city ' $Y$ ' at 06.15 h the next day.
II. Sangita reached the bus - stand of city ' X ' at 14.25 h and got the bus after waiting for 35 min . She reached city ' $Y$ ' at 3.15 h the next day.
17. When was sameer born?
I. Sameer passed out from the university on his $22^{\text {nd }}$ birthday on $16^{\text {th }}$ April 1999.
II. Sameer was elder than Sudha by three years who recently celebrated her $18^{\text {th }}$ birthday.
18. The annual function of college ' $X$ ' was celebrated on which date?
I. The annual function was celebrated on its $25^{\text {th }}$ foundation day.
II. The college was founded on $85^{\text {th }}$ day of the year 1947 .
19. How is Mr. Sandeep related to Sushila?
I. Mr. Sandeep is the only son of Sushila's brother's father - in - law.
II. Mr. Sandeep's father - in - law is Sushila's father.
20. Who among the three friends $A, B$ and $C$ reached the school first?
I. A reached the school at 7.15 am five minutes before the bell rang.
II. B reached before C , who reached the school before the bell rang.
21. What is a two - digit number?
I. The difference between the two digits is 4 .
II. The sum of the digits is equal to the difference between the two digits.
22. The area of a rectangle is equal to that of a circle. What is the circumference of the circle?
I. The ratio of the length and the breadth of the rectangle is $22: 7$, whereas the perimeter is 174 cm .
II. The area of the rectangle is $1386 \mathrm{~cm}^{2}$.
23. Is $A$ the richest person amongst $A, B, C$ and $D$ ?
$I$. The value of the total assets of $A, B$ and $C$ together is less than the sum of the assets of $B, C$ and $D$.
II. The sum of the assets of $B$ and $C$ is equal to the sum of assets of $A$ and $D$.

## Data Sufficiency - 2

In each of the questions given below each question is followed by two statements mark answer
(a) If statement 1 alone can answer but 2 alone can not answer it.
(b) If statement 2 alone can answer but 1 alone can not answer it.
(c) If statement 1 alone as well as 2 alone can answer it.
(d) If statement 1 and 2 both are needed to answer it.
(e) If statement 1 and 2 combined also can not answer it.

1. Find the two digit number $n$ ?
A) The sum of the two digits is 9 .
B) The difference of the two digits is 9
2. Is $x>y$ ? ( $x$ and $y$ both are integers)

> A) $x^{2}>y^{2}$
> B) $x^{3}>y^{3}$
3. Is $x=1 ?(x$ is an integer $)$

> A) $x^{2}-1=0$
> B) $x^{3}+1=0$
4. Is $x>1$ ? ( $x$ is real number )

> A) $x>x^{2}$
> B) $x^{2}=4$
5. Is $a+b+c$ even?
A) $a+b+c+d$ is even
B) $a \times b \times c$ is odd.
6. If 10 is added to both numerator and denominator of fraction $\mathrm{a} / \mathrm{b}$. Will the new fraction be more than the original?
A) $a=45, b=22$
B) $a / b$ is less than 1 .
7. What is the $23^{\text {rd }}$ number in the series?
A) Each number in the series is 2 more than the previous.
B) The $10^{\text {th }}$ number in the series is 45 .
8. Is the number $n$ divisible by 18 ?
A) It is divisible by 3
B) It is divisible by 6
9. Is the number $n$ divisible by 55 ?
A) It is divisible by 5
B) It is divisible by 11
10. Is the number $n$ divisible by 18 ?
A) It is divisible by 36
B) It is divisible by 9
11. Is the number $n$ divisible by 63 ?
A) It is divisible by 18
B) It is divisible by 14
12. Is the number $n$ divisible by 45 ?
A) It is not divisible by 90
B) It is not divisible by 9
13. How many people were there in the queue?
A) Salman was $5^{\text {th }}$ from the start and $12^{\text {th }}$ from end.
B) Abhishek who was at the $10^{\text {th }}$ place from start was 5 places in front of Aishwarya who was $5^{\text {th }}$ from end.
14. What is the time needed to download a picture on internet?
A) The size of the file is 10 mb .
B) The rate of data transfer is $2 \mathrm{~kb} / \mathrm{sec}$.
15. In a hockey test match played against Pakistan India was lagging by 3 goals during the half time did Indian win match?
A) In the next half India scored four goal.
B) Pakistan scored four goals in the whole match.
16. In a diary having only one page for each day how many pages are there in the diary?
A) Jan $18^{\text {th }}$ is Friday.
B) Oct $18^{\text {th }}$ is Friday
17. What is the cost of a bat?
A) 2 bats and 5 balls cost Rs. 786
B) 10 bats and 25 balls cost Rs. 3930
18. $x>y$ ?
A) $x^{2}+6 x+5=0$
B) $y^{2}-7 y+12=0$
19. There was a pack of 120 chocolates distributed among Aishwarya, Salman and Abhishek how many did Abhishek get?
A) Abhishek got $1 / 4^{\text {th }}$ of what Salman and Aishwarya together got.
B) Salman got $3 / 4^{\text {th }}$ of what Aishwarya got.

## Mathematical Operators

Directions for Questions(Q 1 - 5) : In the following questions the symbols $*, \%$, \$, \# and © $\mathfrak{C}$ are need used with the following meanings as illustrated below :
' $\mathbf{P} \$ \mathbf{Q}$ ' means ' $\mathbf{P}$ is smaller than $\mathbf{Q}$ ';
' $\mathbf{P} * \mathbf{Q}$ ' means ' $\mathbf{P}$ is neither smaller than nor greater than $\mathbf{Q}$ ';
' $P$ \# $Q$ ' means ' $P$ is either greater than or equal to $Q$ ';
' $P$ \% Q' means ' $P$ is greater than $Q$ ';
' $P$ © $Q$ ' means ' $P$ is either smaller than or equal to $Q$ '
Now in each of the following questions, assuming the given statements to be true, Give answer (a) if only conclusion I is true; (b) if only conclusions II is true; (c) if either conclusion I or II is true; (d) if neither conclusions I nor II is true; and (e) if both conclusions I and II are true.

| 1. Statements | : B \# D, D * F, F \% H | Conclusions : I.F*B | II. F \$ B |
| :---: | :---: | :---: | :---: |
| 2. Statements | : H \$ J, J * N, N \# T | Conclusions: I. T \% H | II. J \# T |
| 3. Statements | : M \% K, K \# T, T * J | Conclusions: I. J © K | II. T \$ M |
| 4. Statements | : W © F, F \% R, R \# K | Conclusions: I. W \$ KII. | * W |
| 5. Statements | : V © R, R \$ M, M * W | Conclusions: I. W \% V | II. V ©W |

Directions for Questions (Q6-10) : In the following questions the symbols @, \#, \$, \%, *are used with the following meanings as illustrated below :
'A @ B' means ' $A$ is not greater than $B$ ';
' $A$ \# $B$ ' means ' $A$ is greater than or equal to $B$ ';
' $A$ \$ $B$ ' means ' $A$ is neither greater than nor less than $B$ ';
' $A$ \% $B$ ' means ' $A$ is less than $B$ ';
' $A$ * $B$ ' means ' $A$ is neither less than nor equal to $B$ '.
Now in each of the following questions, assuming the given statements to be true, Find which of the three conclusions I, II and II given below them is/are definitely true?
6. Statements : K@ L, L \% N, E \# N

Conclusions: I. K \% E
II. E * L
III. $\mathrm{N} * \mathrm{~K}$
(a) Only I and II are true
(b) Only II and III are true
(c) Only I and III are true
(d) All are true
(e) None of these
7. Statements : D \$ T, T * P, M @ P
Conclusions : I. D * M
II. M \% T
III. D \# P
(a) Only I is true
(b) Only I and II are true
(c) All are true
(e) None of these
8. Statements : T \# R, R \% L, L * K

Conclusions : I. T \% L
II. K * R
III. T \# K
(a) Only I is true
(b) Only I and II are true
(c) All are true
(e) None of these
(d) Only II and III are true
9. Statements : $\mathrm{N} \% \mathrm{~S}, \mathrm{~S} \# \mathrm{U}, \mathrm{U} * \mathrm{M}$

Conclusions : I. M \% S
II. N \% U
III. $\mathrm{N} * \mathrm{M}$
(a) Only I is true
(b) Only II is true
(c) All are true
(e) None is true
10. Statements : C \$ J, J \% V, E @ V
Conclusions: I. E \% J
II. C * V
III. C * E
(a) None is true
(c) Only III is true
(e) All are true
(b) Only II is true
(d) Only I and III are true
(d) Only II and III are true

Directions for Questions (Q 11-17) : In the following questions, the symbols, the symbols @, \%, \#, \$, © are used with different meanings as explained below :
' $\mathbf{P}$ @ $\mathbf{Q}$ ' means ' $\mathbf{P}$ is not greater than $\mathbf{Q}$ ';
' $\mathbf{P} \% \mathbf{Q}$ ' means ' $P$ is neither greater than nor equal to $\mathbf{Q}$ ';
' $P$ \# Q' means ' $P$ is neither smaller than nor equal to $Q$ ';
' $P \$ Q$ ' means ' $P$ is neither smaller than nor greater than $Q$ ';
' $P$ © $Q$ ' means ' $P$ is not smaller than $Q$ '.
In each question, three statements showing relationships have been given, which are followed by two conclusions I and II. Assuming that the given statements are true, find out which of the conclusions is/are definitely true.
Mark answer (a) if only conclusions I is true; (b) if only conclusion II is true; (c) if either conclusion I or II is true; (d) is neither conclusion I nor II is true; and (e) if both conclusions I and II are true.
11. Statements:T@L,L\%N,D© N
12. Statements : J\#R,R@B,B\%H
13. Statements: W @ V, V \# X, Y © V
14. Statements : M \$ K, K © F, F \% H
15. Statements: H © D, D \# R, R @ K
16.Statements : E © H, K \$ H, K @ M
17. Statements: N \% R, R @ K, K \# F

Conclusions: I. N \# T II. L \% D
Conclusions : I.J @ B II. J \% H
Conclusions : I. X \% Y II. X \$ W
Conclusions: I. M \# F II. M \$ F
Conclusions : I. K @ H II. H \# R
Conclusions : I. E \# K II. E \$ M
Conclusions : I. R @ F II. R \# F

Directions for Questions (Q 18-22) : In the following questions, the symbols \$, \#, \%, *, and @ are used with the following meanings as illustrated below :
' $X$ \$ $Y$ ' means ' $X$ is not greater than $Y$ ';
' $X$ \# $Y$ ' means ' $X$ is neither greater than nor smaller than $Y$ ';
' $X$ \% $Y$ ' means ' $X$ is not smaller than $Y$ ';
' $X$ * $Y$ ' means ' $X$ is neither smaller than nor equal to $Y$ ';
' $X$ @ $Y$ ' means ' $X$ is neither greater than nor equal to $Y$ '.
Now in each of the following questions, assuming the given statements to be true, find which of the three conclusions I, II and III given below them is/are definitely true.
18. Statements : D \$ K, H * B, K @ H

Conclusions: I. B \% K
II. B @ K
III. $H * D$
(a) Only I and II are true.
(b) Only either I or II is true
(c) Only I and III are true
(d) Only either I or II, and III are true.
(e) None of these
19. Statements : T @ R, R \$ G, G*B

Conclusions: I. T @ B
II. B *R
III. T \$ G
(a) None is true
(b) Either I or III is true
(c) Only I and III are true
(e) Only I and either II or III
(d) All I, II and III are true
20. Statements : F \# M, M $\mathrm{J}, \mathrm{P} \% \mathrm{~F}$ Conclusions: I. P * JII. P \% J
III. P \# M
(a) Only I is true
(b) Only I and II are true
(c) Only I and III are true
(d) Only II and III or I are true
(e) None of these
21. Statements: $\mathrm{L} \% \mathrm{~J}, \mathrm{~L} @ \mathrm{~K}, \mathrm{~J} * \mathrm{~F}$

Conclusions: I. F @ K
(a) None is true
(c) Only II and III are true
(e) All I, II and III are true.
II. K *J III. F @ L
(b) Only I and II are true
(d) Only I and III are true

## Assumptions

Give answer (a) if only assumptions I is implicit; (b) if only assumptions II is implicit; (c) if either I or II is implicit; (d) if neither I nor II is implicit and (e) if both I and II are implicit.

1. Statement : Detergents should be used to clean clothes.

Assumptions : I. Detergents from more lather.
II. Detergents help to dislodge grease and dirt.
2. Statement : The government has decided to pay compensation to the tune of Rs. 1 lakh to the family members of those who are killed in railway accidents
Assumptions: I.The government has enough funds to meet the expenses due to compensation.
II.There may be reduction in incidents of railway accidents in near future.
3. Statement : "I have not received telephone bills for nine months inspite of several complaints" - A telephone customer's letter to the editor of a daily.
Assumptions:I. Every customer has a right to get bills regularly from the telephone company.
II.The customer's complaints point to defect in the services which is expected to be corrected.
4. Statement :The management of XYZ Pvt. Ltd. asked the worker's union to call off strike immediately otherwise the management would be forced to close down the factory.
Assumptions : I.No alternative other than closing down the factory is left for the management of XYZ Pvt. Ltd.
II. Such threat may have some effects on the worker's union.
5. Statement :Vitamin E tablets improve circulation, keep your complexion in a glowing condition.
Assumptions : I. People like a glowing complexion.
II. Complexion becomes dull in the absence of circulation.
6. Statement :Why don't you go to the court if the employer does not pay you the Provident Fund contribution?
Assumptions :I. Courts can intervene in matter of dispute between employer and employees.
II. It is obligatory for the employer to pay the Provident Fund contribution to the employees.
7. Statement : Nobody can predict as to how long our country would take to contain the unfortunate and disastrous terrorist activities.
Assumptions: I. It is impossible to put on end to terrorist activities.
II. Efforts to control the terrorist activities are on.
8. Statement : His recent investment in the share of Company $A$ is only a gamble.

Assumptions : I. He may incur loss on his investment.
II. He may gain from his investment.
9. Statement : The Principle instructed all the teachers to be careful in class because some students may disturb other students

Assumptions : I. The teachers will handle the situation properly and they will point out the naughty students.
II. The students will welcome the decision of the Principal.
10. Statement : This year most of the shops and departmental stores are offering prizes and discounts on purchase to attract customers.
Assumptions : I. The shops and departmental stores have so far earned a lot of profit, so now they have started sharing it with the customers.
II. Lots of goods are available but the sale is not shooting up. There is no cheer for the customers.
11. Statement : Provide mid-day meals to the children in primary schools to increase the number of students attending schools.
Assumptions : I. Mid-day meals will attract the children to the schools.
II. Those children who are otherwise deprived of good food will attend the schools.
12. Statement : "Private property, trespassers will be prosecuted" - A notice on a plot of land.
Assumptions : I. The passerby may read the notice and may not trespass.
II. The people are scared of prosecution.

## Arguments

Directions Each question given below consist of a statement followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.
Give answer (a) if only argument I is strong; (b) if only argument II is strong; (c) if either I or II is strong ; (d) if neither I nor II is strong and (e) if both I and II are strong.

1. Statement : Should agriculture in rural India be mechanized?

Arguments: I. Yes. It would lead to higher production
II. No many villagers would be left unemployed
2. Statement : Should girls learn arts like judo and karate?

Arguments: I. Yes It will enable them to defend themselves from rogues and ruffians.
II. No they will lose their feminine grace.
3. Statement : Should the political parties be banned

Arguments: I. Yes It is necessary to teach a lesson to the politicians
II. No, It will lead to an end of democracy.
4. Statement : Should the educated unemployed youth be paid "unemployment allowances" by the Government?
Arguments:I. Yes, It will provide them some momentary help to either seek employment or to kickstart some 'self-employment' venture.
II. No, It will dampen their urge to do something to earn their livelihood and thus promote idleness among the unemployed youth.
5. Statement : Should foreign films be banned in India?

Arguments : I. Yes, They depict an alien culture which adversely affects our values. II. No Foreign films are of a high artistic standard.
6. Statement : Should all the practising doctors be brought under Government control so that they get salary from the Government and treat patients free of cost?
Arguments: I. No How can any country do such an undemocratic thing/
II.Yes, Despite many problems, it will certainly help minimize, if not eradicate, unethical medical practices.
7. Statement : Should higher education be completely stopped for sometime?

Arguments: I. No, It will hamper the country's future progress. II. Yes, It will reduce the educated unemployment.
8. Statement : Should there be more than one High Court's in each state in India?

Arguments : I. No. This will be a sheer wastage of taxpayers' money.
II. Yes This will help reduce the backlog of cases pending for a very long time.
9. Statement : Are nuclear families better than joint families?

Arguments : I. No Joint families ensure security and also reduce the burden of wok.
II. Yes, Nuclear families ensure greater freedom.
10. Statement : Should India give away Kashmir to Pakistan?

Arguments : I. No Kashmir is a beautiful state. It earns a lot of foreign exchange for India.
II. Yes This would help settle conflicts.
11. Statement : Should students take part in politics?

Arguments: I. Yes It includes in them qualities of leadership.
II. No They should study and build up their career.
12. Statement : Should there be concentration of foreign investment in only few states?

Arguments: I. No, It is against the policy of overall development of the country.
II. Yes. A large number of states lack infrastructure to attract foreign investment.
13. Statement : Should luxury hotels be banned in India?

Arguments: I. Yes They are places from where international criminals operate.
II. No Affluent foreign tourists will have no place to stay.

## CAUSES AND EFFECTS

Directions (Q. Nos. 1-11):In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer accordingly.
Give answer (a) if statement I is cause and statement II is its effect;
Give answer (b) if statement II is cause and statement I is its effect;
Give answer (c) if both the statement I and II are independent cause;
Give answer (d) if both the statement I and II are effect of independent causes;
Give answer (e) if both the statement I and II are effects of some common causes;

1. I) The prices of onions have gone up
II) The government has decided to ban the exports of onions
2. I) Mr DonBosco has cleared Bank PO exam
II) Mr Don Bosco has cleared CSAT
3. I) Flls have invested more than 20 bn dollars in the Indian markets in last three months
II) It is expected that Mr Modi led NDA will form the next government.
4. I) This year there is a bumper crop of Soyabean
II) This is year there is a poor crop of Cotton
5. I) Mr Besahara Has been arrested.
II) All The accounts of Mr Besahara's companies have been frozen.
6.I) The producers of Tomato Puree have seen more than $100 \%$ increase in the sales in the last month
II) The prices of tomato have gone up from Rs 20 Per kg to Rs 60 per kg in last one month
7.I) This Diwali the Firecrackers sales have been sluggish
II) This Diwali the dry fruit sales are on high
8.I) IT industry though pays well demands long working hours under stressful conditions
II) Many IT professionals are suffering from lifestyle diseases
9.I) RBI has decided to award new banking licences.
II) The rate of inflation has gone up
10.I) The dollar has remained nearly stagnant at Rs 62 in last three months
II) The gold Prices in Indian markets have remained around the same level of Rs 29000 in last three months.
11.I) The Diesel prices have increased by more than $20 \%$ in last 6 months
II) The sales of diesel SUVs have gone up by more than $30 \%$ in last 6 months.
12.The Sensex has reached an all time high of 22000 in April 2014. Which of the following can be possible causes ?
1) The Flls have been on a selling spree in April month
2) The Euro Zone is going through major crises
3) The US markets are also at a all time high of 16000
4) There is an Euphoria in the market about NDA led stable government formation which will go for major economic reforms.
5) The FIIS have been continuously buying Indian Stocks from jan 2014.
a) only 4
b) only 3,4 and 5
c) only 4 and 5
d) only 2 and 4
e) only 2,3 and 4
13.There is a major shift in the pattern of crops grown by farmers in Maharashtra. Majority of cotton growers have shifted to soyabean. What can be possible effect and cause of it respectively.
6) The per acre yield of soyabean is same as that of cotton.
7) There is a huge demand of Indian cotton in export market.
8) The prices of soyabean have declined in last two months
9) Soyabean needs much lesser water than cotton but gives much better income to farmers.
10) The prices of cotton have gone up.
a) 5,3
b) 4,5
c) 4,3
d) 2,5
e) 3,4
14. The sales of passenger cars have decreased by more than $20 \%$ in last 3 months. What can be the possible cause of it.
1) The rate of interests have gone up
2) The government has reduced the excise duty on cars.
3) More and more people are preferring to use public transport these days.
4) The government has taken out the subsidy on petroleum products.
5) The sales of 2 wheelers have gone up
a) all of them
b) only 2,3,4
c) only 1,3,4 and 5
d) only 1,3 and 4
e) only 1 and 3
15.Cause: A severe cyclonic storm swept away most of the state during the last two days.

Which of the following cannot be a possible effect of the above cause?

1) Heavy rainfall was reported in most part of the state during the last two days
2) Many people were rendered homeless as their houses were flown away

3 )The communication system of the state was severely affected and continues to be out of gear4) Govt. has ordered that all the offices and school should be kept open.
5) All are possible effects
16.Effect: The prices of petroleum products have increased by about twenty percent in the past two months.
Which of the following can be a probable cause of the above effect?

1) The prices of food grains and vegetables have shot up by more than thirty percent
2) The truck owners association has decided to increase their rent by about twenty percent with immediate effect.
3) The prices of crude oil in the international market have increased considerably during the past few weeks
4) People have decided to demonstrate against the government's apathy towards rise in price of essential commodities.
5) None of the above.

## Deriving the Conclusions

## Directions : In each questions below is given a passage followed by several inference. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

Mark your answer as :
(a) if the inference is 'definitely true' i.e. it directly follows from the facts given in the passage;
(b) if the inference is 'probably true' though not definitely true in the light of facts given;
(c) if you think the data are inadequate i.e. from the facts given you cannot say whether the inference is likely to be true or false;
(d) if you think the inference is 'probably false' though not definitely false in light of the facts given; and
(e) if you think the inference is 'definitely' false i.e., it contradicts the given facts.

## Questions 1 to 5 :

India needs higher investment in the port sector and still lags far behind the international ports in container traffic, though there has been considerable growth in this segment over the past few years. There is a need to continually benchmark Indian ports against the best ports worldwide and continue to engage in policy efforts so as to attain prices per container of port services which are the lowest in the world. The average turn-around time for ships docking at most of the ports in India has been falling for the past three years. However, preberthing time has been marginally increasing over the years.

1. The best port in the world is located in the United States of America.
2. Indian ports have not been graded so far on the international standard.
3. Indian ports need considerable development to match with the best ports in the world.
4. Pre-breathing time is gradually decreasing over the years.
5. Indian ports offer the lowest price per container as service charges.

## Questions 6 to 10 :

The space exploration has been done mainly by using unmanned satellites called space probes containing a large variety of latest scientific instruments on board. These space probes have provided us the close up pictures and other data about planets and other bodies in the outer space. The climax of the intensive American space programme came when Neil Armstrong became the first man to set foot on the moon on July 20, 1969. Originally, the artificial satellites were launched for studying the upper atmosphere of earth.
6. Thespace probes have increased our knowledge about space and the bodies in it.
7. Space probes are mean to study the upper atmosphere of earth only.
8. Neil Armstrong was the first man to go into space.
9. Space probes are provided with computers.
10. Moon has been explored by man.

## Questions 11 to 15 :

A radical new surgery procedure, laughed at not long ago, is holding out fresh hope for patients of cardiac myopathy or enlargement of the heart. The technique, now in India allows patients to go home two weeks after the operation, to lead a near-normal sedentary life. Cardiac myopathy is a condition that has a variety of causative factors. An attack from one of the 20 identified viruses, parasite infection, long-term alcohol abuse and blood pressure could bring it in, and in rare cases, it could follow child birth and is even known to run in families. The condition is marked by an increase in the size of the heart's chambers and a decrease in the efficiency if pumping.
11. Cardiac myopathy is hereditary.
12. The new technique was never tried in India in the past.
13. The cardiac myopathy slows down the heart beat.
14. Earlier the patients suffering from cardiac myopathy were required to travel abroad for such operation.
15. The efficiency of the heart is inversely proportional to the size of the heart.

## Questions 16 to 20 :

Though the state cultivates only 3.2 lakh tonnes of mangoes, they are of premium quality and with mangoes becoming second most consumed fruit in the world after grapes, the government has been trying exporting it through sea route which is cheaper. An experiment which was done in this regard last year has proved successful.
16. Quality of mangoes is an important factor in exports.
17. The state also exports good quality grapes.
18. There are some problems in exporting mangoes through sea route.
19. Most of the other exports are through sea routes which is cheaper.
20. The state also cultivates a large number of medium quality of mangoes.

## Questions 21 to 25 :

Pollution amounts to slow murder. Regular exposure to industrial and vehicular pollution leads to life threatening diseases like asthma, heart problems, cancer and various other disorders. Therefore nobody has the right to pollute, rich or poor. Industrial and vehicular pollution are growing rapidly across the country. It is not just metropolitan centres that are heavily polluted today but also small and medium towns. Pollution is growing faster than the economy. This is because the western technological model, built on heavy use of energy and materials, is an inherently highly toxic model. It produces huge amounts of toxic pollutants, which can be controlled if there is careful choice of technology and there is considerable discipline in its use.
21. The industries which use higher level of energy create more pollution.
22. The spread of pollution has gathered momentum in the recent past.
23. The smaller industrial units contribute proportionately higher pollution.
24. The pollution level in the western world is considerably more than in India.
25. Proper planning in use of modern technology leads to less pollution in the environment.

## Questions 26 to 30 :

The basic thrust of the Government's policy is to provide price incentive to farmers to make them produce more food. But is a price-incentive system always efficient in ensuring incremental yields? Our contention is that this incentive works only in persuading farmers to shift cultivation from one crop to another depending on which crop is more profitable at the given prices. But it would not be a sufficient condition in ensuring incremental output of all crops which is what is required.
26. This passage is taken from an article written by an expert on agricultural finance.
27. The author is advocating for more yield of various crops.
28. The Government is not ready to increase the procurement price of crops.
29. The farmers are not income-conscious.
30. Recently there was an agitation by farmers for increase in procurement price of crops.

## Questions 31 to 36 :

Urban services have not expanded fast enough to cope with urban expansion. Low investment allocations have tended to be under-spent. Both public (e.g. water and sewage) and private (e.g. low-income area housing) infrastructure quality has declined. This impact of the environment in which children live and the supporting services available to them when they fall ill, seems clear. The decline in average food availability and the rise in absolute poverty point in the same unsatisfactory direction.
31. There is nothing to boast about urban services.
32. The public transport system is in the hands of private sector.
33. Birth rate is higher in urban areas as compared to rural areas.
34. Low-cost urban housing is one of the priorities.
35. The environment around plays an important role on the health status.
36. Though adequate provisions of funds were made but they remained unspent.

## Questions 37 to 40 :

A tiger when killing its natural prey, which it does either by stalking on lying in wait for it, depends for the success of its attack on its speed and to a lesser extent, on the condition of its teeth and claws. When, therefore, a tiger is suffering from one or more painful wounds or when its teeth are missing or defective and its claws worn down, and it is unable to catch animals it has been accustomed to eating, it is driven by the necessity to killing human beings.
37. Human beings are the natural prey of tigers
38. Sharp claws are needed by the tigers to kill animals in the forest.
39. Old age propels tigers to take to man eating.
40. Tiger kills man only when it has been incapacitated through wounds.

## DECISION MAKING ( Attention To Details )

Directions ( $1-5$ ): CCS software's is one of the largest IT companies in India. It invests a lot on right hiring of the talent and selection of the candidate. They are having very strict criteria's for the recruitment process. The criteria's are as follows:

1. Candidate must have scored minimum $70 \%$ marks in $10^{\text {th }}$ and $12^{\text {th }}$ class.
2. Candidate must have scored minimum $60 \%$ marks in B.E / B. Tech / MCA.
3. Candidate should not have given CAT (CCS Aptitude Test) in last six months.
4. Candidate should score minimum $60 \%$ in reasoning section in the written test of CAT.
5. Candidate should score minimum $50 \%$ in verbal section in the written test of CAT.
6. Candidate should answer at least one of the puzzles correctly in the interview.
7. Candidate should score minimum $70 \%$ in the interview.

If a candidate satisfies all the above criteria's, the candidate should be selected for the post of software engineer.
But,
If a candidate satisfies all the above criteria's except (1) then, he should be referred to head of HR if he has scored more than $70 \%$ in B.E / B. Tech / MCA.
If a candidate satisfies all the criteria's except (5), but has answered all the puzzles correctly in the interview should be referred to training manager.
In all the other cases the candidate is rejected.
( Distinction is given only when someone scores more than $75 \%$ marks )
Mark the answer,
(a) If candidate is selected.
(b) If candidate is referred to the head of HR.
(c) If candidate is referred to the training manager.
(d) Data is insufficient.
(e) If candidate is rejected.

1. Ms. Munni Badnam, is a consistent distinction holder throughout $10^{\text {th }}, 12^{\text {th }}$ and B.E. She had scored $66 \%$ in the reasoning section of CAT and $72 \%$ in the verbal section; she answered all the puzzles correctly in the interview and scored $77 \%$ in the interview.
1) $a$
2) $b$
3) c
4) d
5) e
2. Mr. Rangeela, scored $60 \%$ in reasoning section of CAT and $68 \%$ in verbal section. His B. Tech's degree is of $79 \%$, his score in $10^{\text {th }}$ is $70 \%$ and in $12^{\text {th }}$ is $65 \%$ and he has cleared the interview with $80 \%$ marks and by answering two puzzles correctly. And he is appearing CAT for the first time.
1) $a$
2) $b$
3) c
4) d
5) e
3. Mr. lonely is appearing CAT for the first time, and he is having $70 \%$ marks in $10^{\text {th }}, 12^{\text {th }}$ and MCA. He has scored $61 \%$ of marks in the reasoning section of CAT. While facing the interview he was not able to answer a single puzzle correctly
1) $a$
2) $b$
3) c
4) $d$
5) e
4. Ms. Sheela Hatmenaani, is a brilliant student and a gold medalist with distinction throughout her education. As Sheela belongs to a small place and it is her first test, she was not able to clear the verbal section with minimum passing marks but she cleared reasoning section with $74 \%$. And she also cleared the interview by answering all the puzzles correctly with $77 \%$.
1) $a$
2) $b$
3) c
4) d
5) e
5. Mr. SRK is appearing for CAT the first time and is willing to get through it. He scored $87 \%$ marks in $10^{\text {th }}$ and $70 \%$ marks in MCA. His score of interview is $72 \%$ with all the puzzles answered correctly. Even he scored $62 \%$ marks in reasoning section of CAT.
1) a
2) $b$
3) c
4) $d$
5) e

Directions ( $6-10$ ): Team India is preparing hard for World Cup 2011. The team is charged up to replicate its success of 1983. The selectors are also taking the at most care while selecting the members of the team. The following are the criteria's for a candidate to be selected in the team:

1. He should be Indian national and of minimum21 years on $31^{\text {st }}$ March 2011.
2. Should have minimum strike rate of $80 \%$ in last 2 years.
3. Should have scored at least three 50's in IPL - 3 .
4. Should not be endorsing more than five brands.
5. Should have experience of bowling or wicket keeping.
6. Majority of the five member board should give their consent for his selection.

If a candidate satisfies all the criteria's he is selected.
But,
If he satisfies all the criteria's except (1) and has a strike rate of more than $125 \%$ in last one year, should be referred to Chairman BCCI.
If he satisfies all the criteria's except (4) and is ready to give the undertaking that he will not go for any brand promotion activities for next four months starting from $31^{\text {st }}$ March 2011, then should be referred to Secretary BCCI.
In all the other cases the candidate is rejected.

## Mark the answer,

(a) If candidate is selected.
(b) If candidate is referred to the Chairman of BCCI.
(c) If candidate is referred to the Secretary of BCCI .
(d) Data is insufficient.
(e) If candidate is rejected.
6. M.S. Dhoni born and brought up in Jharkhand is a good Batsman and has scored five 50's and three 100's in IPL - 3 and has maintained a strike rate of more than $110 \%$. He is good at wicket keeping also. All the five members of the board are for his selection, he celebrated his $18^{\text {th }}$ birthday on $7^{\text {th }}$ April 2004 . He is currently endorsing only 3 brands.

1) $a$
2) $b$
3) c
4) $d$
5) e
7. Mr. Yusuf Pathan the latest sensation of IPL - 3, born in Baroda is a domiciled of Gujarat, scored three centuries in IPL - 3. Throughout his career spanning for four years, for every match he has maintained a strike rate of $150 \%$,. He was born on $12^{\text {th }}$ March 1990 . He is currently endorsing only three brands. He has worked as fifth bowler in many matches. Except one member all the other members have given their consent for his selection.
1) $a$
2) $b$
3) c
4) d
5) e
8. Mr. Dada Ganguly, a born resident Indian will celebrate his $32^{\text {nd }}$ birthday on $4^{\text {th }}$ June 2011. He is good at bowling, has scored four 50's in IPL - 3. Three of the board members are in favour of his selection. Mr. Dada is struggling with the strike rate and was not able to cross $70 \%$ in the last two years.
1) $a$
2) $b$
3) c
4) d
5) e
9. Mr. Saurav Tiwari was born in Bombay on $15^{\text {th }}$ August 1992, He scored seven 50's in IPL -3 and is expert at wicket keeping also and has consistently maintained a strike rate of more than $90 \%$ in last two years. He is endorsing only one brand. Three of the board members are in favour of his selection.
1) $a$
2) $b$
3) c
4) $d$
5) e
10. Mr. Sachin Tendulkar was born on $8^{\text {th }}$ June 1974, is playing cricket for Indian team for last 20 years. And has scored two 100's and five 50's in IPL - 3 and has a strike rate of more than $100 \%$ through out his career. Currently he is endorsing 15 brands; he has proved to be a very useful bowler during crucial times. He is one of the highest Income Tax payers of Mumbai. Four members of board want him to be selected.
1) $a$
2) $b$
3) c
4) $d$
5) e

Directions (11-15): For a candidate to be selected in Pankaj Gandhi's Academy as an English teacher. Following are the criteria's:

1. Should be of minimum 30 years on $1^{\text {st }}$ Jan 2011.
2. Should have scored minimum 99\% in English section of CAT in last three years.
3. Should have done MBA (HR) / MA (English) with minimum $75 \%$ marks.
4. Should score minimum $90 \%$ marks in PGA teacher's test.
5. Should be ready to take three lectures a day.
6. Should be a married candidate.

If the candidate satisfies all the criteria's, he or she is selected.
But,
If he satisfies all the criteria's except (1), but has $M$. Phil then should be referred to the Managing Director.
If he satisfies all the criteria's except (5), but is ready to take two lectures a day should be selected on Ad-Hoc basis.
In all the other cases the candidate is rejected.
Mark the answer,
(a) If candidate is selected.
(b) If candidate is referred to the Managing Director.
(c) If candidate is allowed to take two lectures a day.
(d) Data is insufficient.
(e) If candidate is rejected.
11. Mrs. Subia was born in 1979 in the month of June and got married in 2004 and is currently staying with her husband in pune.. She has completed her MA in English with 89\%. And she had scored $99.29 \%$ in the English section of CAT in the year 2008. And she also cleared the PGA teacher's test with $95 \%$ and is ready to take four lectures a day.

1) $a$
2) $b$
3) c
4) $d$
5) e
12. Mr. Gorge Juda has been teaching English for last 20 years. His date of birth is 13 / 5 / 1947. He had always failure in love with all the three relationships not materializing in marriage. He has done his M. Phil from Pune University.
1) $a$
2) $b$
3) c
4) d
5) e
13. Ms. Komal has cleared the English section of CAT with $99.02 \%$ in the year 2010, and she was born on $6 / 6 / 1983$. She has cleared the PGA teacher's test with $91 \%$ and recently got married and stays with her husband. She is ready to take three lectures a day without any problem. She is a MBA (HR) and also has completed her M. Phil.
1) $a$
2) $b$
3) c
4) $d$
5) e
14. Mr. Mishra, an MBA by profession has cleared the CAT test with overall of $98 \%$ and English section with $99 \%$ in 2010, has also cleared the PGA teacher's test with $90.45 \%$ and was born in the year 1970. He recently got married. He is ready to devote his whole day to teaching and is willing to take up to 4 lectures a day. His scored $92 \%$ in MBA.
1) $a$
2) $b$
3) c
4) $d$
5) e
15. Mr. Hasmukh was born on $1 / 4 / 1967$. He is a father of two children and has completed his MA in English with $87 \%$ and is ready to take three lectures a day. He cleared the English section of CAT with $99.01 \%$ in the year 2009 but got $89.12 \%$ marks in PGA teacher's test.
1) $a$
2) $b$
3) c
4) d
5) e

## MAGIC SQUARE

1. 

| 9 | 36 | 25 |
| :---: | :---: | :---: |
| 4 | 16 | 9 |
| 1 | 9 | 4 |
| 6 | 13 | $?$ |

(a) 5
(b) 10
(c) 11
(d) 15
3.

| 6 | 11 | 25 |
| :--- | :--- | :--- |
| 8 | 6 | 16 |
| 12 | 5 | $?$ |

(a) 18
(b) 16
(c) 12
(d) 10
5.

| 2 | 4 | 0 |
| :--- | :--- | :--- |
| 1 | 2 | 4 |
| 3 | 1 | 3 |
| 36 | $?$ | 91 |

(a) 25
(b) 48
(c) 59
(d) 73
7.

| 51 | 11 | 61 |
| :---: | :---: | :---: |
| 64 | 30 | 32 |
| 35 | $?$ | 43 |

(a) 25
(b) 27
(c) 32
(d) 37
9.

| 28 | 20 | 7 |
| :---: | :---: | :---: |
| 84 | 35 | 12 |
| 45 | $?$ | 9 |

(a) 15
(b) 18
(c) 20
(d) 25
11.

| 11 | 6 | 8 |
| :---: | :---: | :---: |
| 17 | 12 | $?$ |
| 25 | 34 | 19 |
| 19 | 28 | 11 |

(a) 9
(b) 13
(c) 15
(d) 16
2.

| 5 | 9 | 8 | 7 |
| :---: | :---: | :---: | :---: |
| 8 | 6 | 9 | 10 |
| 7 | 13 | $?$ | 19 |
| 5 | 7 | 8 | 9 |

(a) 9
(b) 10
(c) 12
(d) 15
4.

| 13 | 54 | $?$ |
| :--- | :--- | :--- |
| 7 | 45 | 32 |
| 27 | 144 | 68 |

(a) 42
(c) 6
(d) 4
6.

| 6 | 15 | 20 |
| :--- | :--- | :--- |
| 8 | 4 | 5 |
| 3 | 5 | 20 |
| 51 | 65 | $?$ |

(a) 12
(b) 51
(c) 56
(d) 120
8.

| 72 | 24 | 6 |
| :---: | :---: | :---: |
| 96 | 16 | 12 |
| 108 | $?$ | 18 |

(a) 12
(b) 16
(c) 18
(d) 20
10.

| $?$ | 13 | 49 |
| :---: | :---: | :---: |
| 9 | 17 | 69 |
| 13 | 11 | 59 |

(a) 5
(b) 9
(c) 10
(d) 21
12.

| 3 | 2 | 2 |
| :---: | :---: | :---: |
| 6 | 20 | 4 |
| 12 | 25 | 64 |
| 6 | 10 | $?$ |

(a) 6
(b) 8
(c) 10
(d) 12
13.

| 2 | 5 | 10 |
| :--- | :--- | :--- |
| 17 | $?$ | 37 |
| 50 | 65 | 82 |

(a) 20
(b) 26
(c) 27
(d) 32
15.

| 2 | 2 | 256 |
| :--- | :--- | :--- |
| 3 | 2 | $?$ |
| 4 | 2 | 46656 |

(a) 2765
(b) 3125
(c) 8796
(d) 30008
17.

| 1 | 3 | 7 |
| :--- | :--- | :--- |
| 5 | 12 | 14 |
| 25 | $?$ | 28 |
| 125 | 192 | 56 |

(a) 64
(b) 56
(c) 48
(d) 40
19.

| 24 | 144 | 384 |
| :--- | :--- | :--- |
| 6 | 36 | $?$ |
| 2 | 12 | 32 |
| 1 | 6 | 16 |

(a) 80
(b) 85
(c) 91
(d) 96
21.

| 42 | 44 | 38 |
| :--- | :--- | :--- |
| 23 | 55 | 28 |
| 37 | $?$ | 39 |

(a) 22
(b) 33
(c) 66
(d) 77
23.

| 8 | 17 | 33 |
| :--- | :--- | :--- |
| 12 | 5 | 29 |
| 10 | 13 | $?$ |

(a) 9
(b) 23
(c) 33
(d) 43
25.

| 963 | 2 | 844 |
| :--- | :--- | :--- |
| 464 | $?$ | 903 |

(a) 1
(b) 2
(c) 3
(d) 4

14. $\quad$| 16 | 210 | 14 |
| :--- | :--- | :--- |
| 14 | 156 | 12 |
| 12 | $?$ | 10 |

(a) 90
(b) 100
(c) 110
(d) 120
16.

| 23 | 529 | 1024 |
| :--- | :--- | :--- |
| 21 | 441 | 144 |
| 19 | 361 | $?$ |

(a) 1441
(b) 3529
(c) 8281
(d) 9361
18.

| 7 | 4 | 5 |
| :--- | :--- | :--- |
| 8 | 7 | 6 |
| 3 | 3 | $?$ |
| 29 | 19 | 31 |

(a) 3
(b) 4
(c) 5
(d) 6
20.

| 31 | 17 | 58 | 67 |
| :--- | :--- | :--- | :--- |
| 68 | 19 | 61 | 56 |
| 91 | 22 | 70 | 50 |
| 10 | 142 | 11 | $?$ |

(a) 13
(b) 69
(c) 27
(d) 35
22.

| 1 | 7 | 9 |
| :---: | :---: | :---: |
| 2 | 14 | $?$ |
| 3 | 105 | 117 |

(a) 26
(b) 20
(c) 16
(d) 12
24.

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| 11 | 7 | 5 |
| 120 | 45 | $?$ |

(a) 19
(b) 17
(c) 16
(d) 15
26.

| 188 | 300 | 263 |
| :--- | :--- | :--- |
| 893 | $?$ | 915 |

(a) 88
(b) 96
(c) 238
(d) 500

## Encrypting Algorithms-1

In each of these questions,each alphabet represents a unique digit from 0 to 9.Simply it means if $A$ value is 5 at every place value of $A$ will be 5 and nothing else will be 5.One more rule is ,leftmost digit is never zero.For each of the questions find the values of each alphabet.
1.

| A $B$ |
| ---: |
| $\times \quad A \quad B$ |
| $A$ |

2. $\mathrm{O} \mathrm{N} E$ $\begin{array}{r}+O N \mathrm{E} \\ +\mathrm{ONEE} \\ +O N \mathrm{~N} \\ \hline \text { T E N }\end{array}$
3. $\mathrm{S} O \mathrm{O} \mathrm{N}$ $+\mathrm{MOON}$ $\begin{array}{r}+N \mathrm{O} O \\ \hline \mathrm{~J} U \mathrm{~N}\end{array}$
4. 

|  | $S$ | $E$ | $N$ | $D$ |
| :---: | :---: | :---: | :---: | :---: |
| + | $M$ | $O$ | $R$ | $E$ |
| $M$ | $O$ | $N$ | $E$ | $Y$ |

5. 


6.

7.

|  | $X$ | $Y$ | $Z$ |
| :--- | :--- | :--- | :--- |
| + |  | $A$ | $B$ |
| C | D | E | F |

8. 

$\left.\begin{array}{rrr}X & Y & Z \\ - & & A \\ \hline & B & G\end{array}\right]$
9.

|  |  | T | W | $O$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $\times$ | T | W | $O$ |
| T | $H$ | $R$ | $E$ | $E$ |

Encrypting Algorithms-2
1.

2.

3.

5.

6.

|  |  |  | O | T | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\times$ | H | A | S |
|  |  | T | I | C | O |
|  | C | H | K | C | + |
| C | L | A | I | + | + |
| C | O | O | K | O | O |

## VISUAL REASONING

Directions: Each of the following questions consists of five figures marked $A, B, C$, $D$ and $E$ called the problem figures followed by five other figures marked 1, 2, 3, 4 and 5 called the Answer figures. Select a figure from amongst the answer figures which will continue the same series as established by the five Problem Figures

PROBLEM FIGURES
1.

2.

3.


ANSWER FIGURES

6.

7.

8.

9.

10.

11.

13.

14.


16.

A

B
C

18.

19.

20.

17.

21.

22.

23.

24.

25.

26.

27.

28.

29.

30.

31.

32.
33.

34.

35.

36.





## Direction Sense Test -1

1. A man is facing towards west and turns through $45^{\circ}$ clockwise, again $180^{\circ}$ clockwise and then turn through $270^{\circ}$ anti clockwise. In which direction is he facing now?
(a) West
(b) North-West
(c) South
(d) South-west
2. I am facing east. I turn $100^{\circ}$ in the clockwise direction and then $145^{\circ}$ in the anti clockwise direction. Which direction am I facing now?
(a) East
(b) North-East
(c) North
(d) South-West
3. A river flows west to east and on the way turns left and goes in a semi-circle round a hillock, and then turns left at right angles. In which direction is the river finally flowing?
(a) West
(b) East
(c) North
(d) South
4. You go, North, turn right, then right again and then go to the left. In which direction are you now?
(a) North
(b) South
(c) East
(d) West
5. I am standing at the centre of a circular filed. I go down south to the edge of the field and then turning left I walk along the boundary of the field equal to three-eighths of its length. Then I turn west and go right across to the opposite point on the boundary. In which direction am I from the starting point?
(a) North-West
(b) North
(c) South-West
(d) West
6. Kunal walks 10 kilometres towards North. From there, he walks 6 kilometres towards South. Then he walks 3 kilometres towards East. How far and in which direction is the with reference to his starting point?
(a) 5 kilometres West
(b) 5 kilometres North-East
(c) 7 kilometres East
(d) 7 kilometres West
7. Rohan walks a distance of 3 km towards North, then turns to his left turn and walked 2 km . He again turns left and walks for 3 km . At this point he turns to his left and walks for 3 km . How many kilometres is he from the starting point?
(a) 1 km
(b) 2 km
(c) 3 km
(d) 5 km
8. Manick walked 40 meters towards North, took a left turn and walked 20 meters. He again took a left turn and walked 40 meters. How far and in which direction is he from the starting point?
(a) 20 meters East
(b) 20 meters North
(c) 20 meters South
(d) 100 meters South
(e) None of these
9. Namita walks 14 meters towards west, then turn to her right and walks 14 meters and then turns to her left and walks 10 meters. Again turning to her left she walks 14 meters. What is the shortest distance (in meters) between her starting point and the present position?
(a) 10
(b) 24
(c) 28
(d) 38
10. A man leaves for his office from his house. He walks towards East. After moving a distance of 20 m , he turns South and walks 10 m . Then he walks 35 m towards the West and further 5 m towards the North. He then turns towards East and walks 15 m . What is the straight distance (in meters) between his initial and final positions?
(a) 0
(b) 5
(c) 10
(d) Cannot be determined
11. A rat runs $20^{\prime}$ towards East and turns to right, runs $10^{\prime}$ and turns to right, runs 9 ' and again turns to left runs $5^{\prime}$ and then turns to left, runs 12 ' and finally turns to left and runs 6 ' Now, which direction is the rat facing?
(a) East
(b) West
(c) North
(d) South
12. Amit walked 30 meters towards East, took a right turn and walked 40 meters. Then he took a left turn and walked 30 meters. In which direction is he now from the starting point?
(a) North-East
(b) East
(c) South-East
(d) South
13. Maya starts at point $T$, walks straight to point $U$ which is 4 ft away. She turns left at $90^{\circ}$ and walks to $W$ which is 4 ft away, turns $90^{\circ}$ right and goes 3 ft to P , turns, $90^{\circ}$ right and walks 1 ft to $Q$, turns left at $90^{\circ}$ and goes to $V$, which is 1 ft away and once again turns $90^{\circ}$ right and goes to $R, 3 \mathrm{ft}$ away. What is the distance between $T$ and $R$ ?
(a) 4 ft
(b) 5 ft
(c) 7 ft
(d) 8 ft
14. A villager went to meet his uncle in another village situated 5 km away in the North-east direction of his own village. From there he came to meet his father-in-law living in a village situated 4 km in the south of his uncle's village How far away and in what direction is he now?
(a) 3 km in the North
(b) 3 km in the East
(c) 4 km in the East
(d) 4 km in the West
15. A person starts from a point $A$ and travels 3 km eastwards to $B$ and then turns left and travels thrice that distance to reach C . He again turns left and travels five times the distance he covered between A and B and reaches his destination D. The shortest distance between the starting point and the destination is.
(a) 12 km
(b) 15 km
(c) 16 km
(d) 18 km
16. Sanjeev walks to 10 meters towards the South. Turning to the left, he walks 20 meters and then moves to his right. After moving a distance of 20 meters, he turns to the right and walks 20 meters. Finally, he turns to the right and moves a distance of 10 meters. How far and in which direction is he from the starting point?
(a) 10 meters North
(b) 20 meters South
(d) 10 meters South
(e) None of these
17. I am facing South. I turn right and walk 20 m . Then I turn right again and walk 10 m . Then I turn left and walk 10 m and then turning right walk 20 m . Then I turn right again and walk 60 m . In which direction and I from the starting point?
(a) North
(b) North-West
(c) East
(d) North-East
18. A man walks 1 km towards East and then he turns to South and walks 5 km . Again he turns to East and walks 2 km , after this he turns to North and walks 9 km . Now, how far is he from his starting point?
(a) 3 km
(b) 4 km
(c) 5 km
(d) 7 km
19. Going 50 m to the South of her house, Radhika turns left and goes another 20 m . Then, turning to the North, she goes 30 m and then starts walking to her house. In which direction is she walking now?
(a) North-West
(b) North
(c) South-East
(d) East
20. A walks 10 meters in front and 10 meters to the right. Then every time turning to his left, he walks, 5,15 , and 15 meters respectively. How far is he now from his starting point?
(a) 5 meters
(b) 10 meters
(c) 15 meters
(d) None of these

## Direction Sense Test - 2

1.A school bus driver starts from the school, drives 2 km towards North, takes a left turn and driver for 5 km . He then takes a left turn and drivers for 8 km before taking a left then takes a left turn again and driving for 5 km . The driver finally takes a left turn and drives 1 km before stopping. How far and towards which direction should the driver to reach the school again?
(a) 3 km towards North
(b) 7 km towards East
(c) 6 km towards South
(d) 6 km towards West
(e) 5 km towards North
2. A person starts from point $P$ in East and moves 12 m to point $Q$. Then, he moves right 8 m to point R. Again he moves right for 6 m to point S . Then, he moves 6 m in the North to point T. Finally from there he goes to left for 6 m to point $U$. Which of three point he would form a triangle whose all the angles are less than $90^{\circ}$ ?
(a) PTQ
(b) QTR
(c) UTS
(d) TSR
(e) SRQ
3. A person starts from Point A, walks 30 m towards South and reaches Point B. He then takes a right, walks 7 m , followed by a right turn, and walks for 6 m . He then takes a right turn and walks 7 m . He takes a final left turn, walks a certain distance and reaches Point R. Point $R$ is 17 m to the North of Point $B$. What is the distance between Point A and Point R
(a) 18 m
(b) 23 m
(c) 3.21 m
(d) 4.27 m
(e) 13 m
4.Tinku, Pappu, Gotu and Bittu are playing cards. Tinku and Pappu are facing each other and the other two are facing each other. Bittu is to the right of Pappu who is facing West. Then Gotu is facing?
(a) East
(b) South
(c) 3.North
(d) West
(e) None of these

Directions (Q. 5-6): Study the following information carefully and answer the questions given below:

P starts walking from his house to school. At first he walks 6 m north, then he turns to right and walks 8 m . Again ,he turns to his left and walks 3 m . After that he turns to his right and walks 2 m . Finally he turns to his right and walks 9 m to reach his school.
5. How far is P's school from his house?
(a) 8 m
(b) 10 m
(c) 11 m
(d) $14 m$
(e) None ofthese
6. In which direction is P's house from his school?
(a) Northwest
(b) East
(c) West
(d) South
(e) None of these
7.A person rode his bicycle Northwards, then turned left and rode one km and again turned left and rode 2 km . He found himself exactly one km West of his starting point. How far did he ride Northwards initially?
(a) 1 km
(b) 2 km
(c) 3 km
(d) 4 km
(e) 5 km
8.Rasik walked 20 m towards north. Then he turned right and walks 30 m . Then he turns right and walks 35 m . Then he turns left and walks 15 m . Finally he turns left and walks 15 m . In which direction and how many meters is he from the starting position?
(a) 15 m West
(b) 30 m East
(c) 30 m West
(d) 45 m East
(e) None of these
9. Two cars start from the opposite places of a main road, 150 km apart. First car runs for 25 km and takes a right turn and then runs 15 km . It then turns left and then runs for another 25 km and then takes the direction back to reach the main road. In the mean time, due to minor break down the other car has run only 35 km along the main road. What would be the distance between two cars at this point?
(a) 65 km
(b). 75 km
(c) 80 km
(d) 85 km
(e) None of these
10. Starting from the point $X$, Jayant walked 15 m towards west. He turned left and walked 20 km . He then turned left and walked 15 m . After this he turned to his right and walked 12 m . How far and in which directions is now Jayant from X ?
(a) 32 m , South
(b) 47 m , East
(c) 42 m , North
(d) 27 m , South
(e) None of these
11. Rahul starts from his house towards West. After walking a distance of 50 metres he turned towards right and walked a distance of 30 metres. He then turned left and moving a distance of 25 metres turned to his left again and walked 40 metres. He now turns to the left and walks 2 metres. Now finally he turns to his left. In which direction is he walking now?
(a) North
(b) South
(c).East
(d) South-west
(e) West
12.A clock is tiled in such way that at $4: 30 \mathrm{pm}$ its hour hand is pointing exactly to west . Find in which direction will the minute hand of the same watch point at 10.30 pm .
(a) North west
(b)south east
(c) South west
(d) north east
(e) None of these
13.Mehak was in a whimsical mood and to reach her home from her office she took the following steps - 4 towards North, 3 steps towards East, 8 steps towards South, 6 steps towards West, 7 Steps towards North, 5 Steps towards east, 6 steps towards South, 4 steps towards West and finally reached her home taking 3 steps towards North. The location of Mehak's home with respect to her office is:
(a) 3 steps to the East
(b) 3 steps to the West
(c) 0 steps
(d) 2 steps towards to the East
(e) 2 steps to the West
14. Philip was taking an evening stroll. He started walking north and walked for 50 meters, then he took a left turn and walked for another 20 meters, then he took a right turn and walked for 10 meters and sat on a bench there. In which direction does the bench lie from Philip's starting point?
(a) North-West
(b)South-East
(c) South-West
(d) North
15. Two friends are starting from same point .Deepika walks 10 m towards east direction ,then she turns right direction and walks 10 m . Finally , she left direction and walks 5 m . Ranveer walks towards west direction 10 m then he turns right direction and walks 20 m , finally he turns left direction and walks 15 m . Now what is the shortest distance between Deepika and Ranveer.
a) 45 m
(b) 50 m
(c) 30 m
(d) None of these
16.Akshay starts from his home to his office. He walks towards East. After walking 15 metres he turns towards South and walks 25 metres. Then he walks 20 metres towards West and further 25 metres towards the North. He then turns towards east and walks for 20 metres. What is the straight distance between his initial and final position?
(a) 15
(b) 20
(c) 18
(d) 24
17.If Ajmer is to the South of Bengaluru and Chennai is to the East of Bengaluru, in what direction is Ajmer with respective toChennai?
(a)North-east
(b) North-west
(c) South-east
(d) South-west
18.Ajay walks 15 km towards his East. From there he again comes 10 km behind and takes a right turn to walk a distance of 12 km . How far and in which direction is he from the starting point?
a) 12 East-west
b) 13 North-east
c) 14 West-east
d) 15 North-west
(Direction 19-20) : From the information given answer the following questions:
Dipak, Komal, Niraj, Amar and Priya are standing on a ground facing Northwards.
a)Komal is 60 m to the right of Asha
b)Dipak is 50 m to the South of Komal
c) Niraj is 30 m to the West of Asha
d)Priya is 100 m to the North of Dipak
19.Who is to the North-east of the person who is to the left of Komal?
a)Dipak
b) Niraj
c) Asha
d) Priya
20.If a person walks from Niraj to Asha to Komal to Dipak to Priya, how much distance does he cover if he walks in astraight line?
a) 190
b) 240
c) 270
d) 350
e) None of these
21.A watch is showing $4: 30 \mathrm{pm}$. By mistaking the watch got tilted and the minute had is pointing to East. Then In which direction will be the Hour hand
a) North east
b) South west
c) north West
d) South East e) none of these
22.A watch got tilted in such a way that it's $3: 00 \mathrm{pm}$ and the Minute hand is pointing exactly to South West. In which direction will the hour Hand at 7:30 pm.
a) North
b) South
c) West
d) east
e) None of these
23.A man travels 3 kms to the west, turns left and goes 3 kms , turns right and goes 1 km , again turns right and goes 3 kms . How far is he from the starting point?
(a) 7 kms
(b) 6 kms
(c) 5 kms
(d) 4 kms
24.Renuka started walking from her house. She first walked for 3 km towards West, then she turned towards North and moved 4 km in that direction. How far Renuka is from her house?
(a) 3 km South
(b) 3 km North
(c) 5 km West
(d) 5 km North-West

## Syllogisms

## Syllogisms Important Concepts

| Statements | Conclusions |
| :---: | :---: |
| 1. All $X$ are $Y$ | 1.Some Y are X |
| 2. Some $X$ are $Y$ | 1.Some $Y$ are $X$ <br> 2. Some $X$ are not $Y$ |
| 3. Only X are Y | $\begin{aligned} & \text { 1.All } Y \text { are } X \\ & \text { (As to be } Y \text { you need to be } X \text { ) } \end{aligned}$ |
| 4. No $X$ are $Y$ | 1.No Y are X |
| 5. All $X$ are $Y$ All Y are $\mathbf{Z}$ | 1. All $X$ are $Z$ <br> 2. Some $Z$ are $X$ |
| 6. All $X$ are $Y$ All $Z$ are $Y$ | 1.No Conclusion between X and Z |
| 7. All $X$ are $Y$ All X are Z | 1.Some $Y$ are $Z$ <br> 2. Some $Z$ are $Y$ |
| 8. All $X$ are $Y$ All $Z$ are $X$ | 1. All $Z$ are $Y$ 2. Some $Y$ are $Z$ |
| 9. All $X$ are $Y$ Some $Y$ are $Z$ | 1.No Conclusion between X and $Z$ |
| 10. All $X$ are $Y$ Some $Z$ are $Y$ | 1.No Conclusion between X and Z |
| 11. All $X$ are $Y$ Some $X$ are $Z$ | 1. Some $Y$ are $Z$ <br> 2. Some $Z$ are $Y$ <br> 3. Some $Y$ are not $Z$ |
| 12. All $X$ are $Y$ Some $Z$ are $X$ | 1.Some $Y$ are $Z$ <br> 2. Some $Z$ are $Y$ |
| 13. All $X$ are $Y$ No $Y$ are $Z$ | 1. No $X$ are $Z$ <br> 2. No $Z$ are $X$ |
| 14. All $X$ are $Y$ No $Z$ are $Y$ | 1. No $X$ are $Z$ <br> 2. No $Z$ are $X$ |
| 15. All $X$ are $Y$ No $X$ are $Z$ | 1.Some Yare not Z |
| 16. All $X$ are $Y$ No $Z$ are $X$ | 1.Some Y arenot Z |
| 17. Some $X$ are $Y$ Some $Y$ are $Z$ | 1.No Conclusion between X and Z |
| 18. No $X$ are $Y$ No $Y$ are $Z$ | 1.No Conclusion between X and Z |
| 19. Some $X$ are $Y$ No $Y$ are $Z$ | 1. Some $X$ arenot $Z$ |

## Syllogisms : Important Points to remember

- If Statement is given that

Most Xs are Ys, Many Xsare Ys ,Xs are often Ys , Few Xs are Ys, 5\% Xs are Ys, $95 \%$ Xs Are Ysall of these meanSome $\mathbf{X}$ are $\mathbf{Y}$

- Most important Type is one statement of All type and second Statement of Some Type the best way to solve them is to keep in mind that , what all is outside all (All X are $\mathbf{Y}$ ) if that is present in some no conclusion is drawn by combining them.
For Example :1. All Pokemons are cartoons .Some cartoons are Minions.
No conclusion between Pokemons and Minions.
2.All wrestlers are strong. Some Soft hearted are strong.

No conclusion between wrestler and Soft hearted
what all is inside all (All $X$ are $Y$ ) if that is present in someconclusions will come in the form of some

- Statements with which you cannot draw any conclusion (No Conclusion)

For Example: All X are Y .Some Y are Z
For the above statement the conclusion will be Either $\mathbf{x}$ are $\mathbf{z}$ or No $\mathbf{x}$ are $\mathbf{z}$

## Syllogisms - 1

Directions (Q 1-5): Given below are the two statements followed by two conclusions. Disregarding commonly known facts, taking statements to be thoroughly true, mark your answer as
(a) If only I follows
(b) If only II follows
(c) If both I and II follows
(d) None follows

1. Statements: Some moons are stars. Conclusions:I.Some moons are Planet.

No Stars is a planet.
II. No moon is a planet.
2. Statements: No women is less than a man. Some women work

Conclusions: I. Man can work II. Some working people are less than man.
3. Statements: Some books are good.

Conclusions: I. Some books are cheap.

No good thing is cheap.
II. Some books are not cheap.
4. Statements All beasts are ugly.

Some ugly people are good at heart.
Conclusions: I. Some good at heart people are not ugly. II. All ugly things are not beasts:
5. Statements: Many actresses are young.

All young people are energetic.
Conclusions: I. Some actresses are energetic.
II. No young person is actress.

Directions (Q 6-10): Each question contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.

## 6.Statements:

A. Luis is a perseverant man.
B. Stamina is essential for mountain climbers.
C. Luis is not a perseverant map.
D. Perseverance is required for a rock climber
E. Stamina is not required by rock-climbers
F. Luis can be a rock-climber
(a) DAF
(b) DCF
(c) BDF
(d) DFE

## 7. Statements:

A. Silverline works without computers.
B. Information network cannot work without computers.
C. Computers are essential for communication system.
D. Silverline is an information network.
E. Information networks works with computers.
F. Information networks work without computer
(a) FAD
(b) FDA
(c) BED
(d) BDE

## 8. Statements:

A. Brand X is a detergent.
B. No detergents are harmful.
C. Some detergents are harmful
D. Brand $X$ is harmful
E. Brand $X$ is harmless
$F$. Brand $X$ is not a detergent.
(a) ABC
(b) ABE
(c) BEA
(d) CDA

## 9. Statements:

A. Some women are housewives.
B. Dorothy is a career woman.
C. Laila is a housewife. .
D. All women are career women.
E. Career women cannot be housewives.
F. Some career women are housewives.
(a) ADF
(b) BDE
(c) ACE
(d) FBD

## 10. Statements:

A. All those who are neighbours indulge in rivalry
B. Neighbours are often rivals.
C. Benson and Edward cannot be neighbours.
D. Benson and Edward are neighbours.
E. Neighbours do not indulge in rivalry.
F. Benson and Edward may indulge in rivalry.
(a) AFC
(b) BDE
(c) BCE
(d) BDF

Directions (Q 11-15): In the questions given below each question contains four statements followed by some conclusions. Mark the right answer.
11. Statements: All dogs Bark. All men bark. Some cats are dogs. Some tigers are cats.

Conclusions: 1 . Some men are dogs.
2. Some men are tigers.
3. Some cats bark.
4. Some of those who bark are not cats.
5. Some cats do not bark.
(a) All follow
(b) 2,3,4 and 5 follow
(d) Only 3 and 5 follow
(e) none of these
(c) 3,4 and 5 follow
12. Statements: All pins are staplers.

No pin is paperweight.
All paperweights are heavy.
Some heavy are dumbs.

Conclusions: 1. Some staplers are paperweight. 2. No stapler is paperweight.
3. Some paperweights are dumb.
4. No pin is heavy.
5. No pin is dumb.
(a) 4 and 5 follow
(b) 2,3,4 and 5 follow
(c) None of them follow
(d) either 1 or 2 follows
(e) none of these
13. Statements: Some Singhs are kings.

No Akshay is king.
No king is khan.
All Santas are Singh.
Conclusions: 1.Some khans are singhs.
2. No Akshay is khan.
3.Some santas are kings. 4. Some Akshays are Santas.
5. Some Akshays may be singhs.
(a) All follow
(b) 2,3,4 and 5 follow
(d) only 3 and 5 follow
(e) only 5 follows
(c) 3,4 and 5 follow
14. Statements: Some Liars are intelligent. Dr. Raju is Liar. All Satyams are liars. Some Satyams are computers.

Conclusions: 1. Dr. Raju is intelligent.
3. Some Satyams are intelligent.
5. Some Computers are intelligent.
(a) 1,2 and 4 follow
(b) 2,3 and 4 follow
(d) either 3 or 4
(e) only 5 follows
15. Statements: Some Skyscrapers are WTCs. Burj Al Arab is a skyscraper.
2. Dr. Raju is Satyam.
4. No Satyam is intelligent.
(c) 3 and 4 follow

All Skyscrapers are tall.
Some talls are tilted.

Conclusions: 1. Burj AI Arab is tilted.
3. Some WTCs are tilted.
5. Burj AI Arab is not WTC.
(a) 1, 2 and 4 follow
(b) 2,3 and 4 follow
(d) either 3 or 4 follow
(e) 2 and either 4 or 5 follow
2. Burj Al Arab is tall.
4. Burj AI Arab is WTC.

Directions (16-20): In each of the following questions three statements are given followed by some in inferences mark the right answer.
16. Statements: All poos are sexy.

Some Kareenas are sexy.
Some Kareenas are Kapoors.
Conclusions: 1. Some Kapoors are sexy.
3. Some Kareenas are poos.
(a) only 1 follows
(b) only 1 and 2 follow
(d) only 2 and 3 follows
(e) None follows
2. Some Kapoors are poos.
17. Statements: All Pinkis are Chinki.

Some Pinkis are cute.
All chubbies are cute.

## Conclusions:

1. Some Pinkis are chubby.
2. No Pinki is chubby.
(a) only 1 follows
(b) only 1 and 2 follow
(c) only 3 follows
(d) only 1 and 3 follow
(e) 2 and either 1 or 3 follows.
3. Some Chinkis are cute.
4. Statements: All Bipashas are Basus.

All Basus are dhassus.
All Johns are Basus

Conclusions: 1. All Bipashas are dhassus .
3. Some dhassus are Bipashas .
(a) only 1 follows
(b) only 1 and 2 follow
(a) only 1 follows
(d) only 2 and 3 follow
(e) all follow
2. Some Johns are Bipashas.
(c) only 1 and 3 follows

Pankaj Gandhi's Academy/Work Sheets
19. Statements: Some Latkas are Jhatkas.

All Jhatkas are Kolhapuri.
Some Kolhapuri are spicy.
Conclusions: 1. Some Latkas are kolhapuri
2. No latka is Kolhapuri.
3. Some latkas are spicy.
(a) only 1 follows
(b) only 1 and 2 follows
(c) either 1 or 2 follows
(d) either 2 or 3 follows
(e) None of these
20. Statements: Some Munnas are Mobiles.

No mobile is a pager.
Some Pappus are pagers.
Conclusions: 1. Some Pappus are mobiles
2. No Pappu is mobile.
3. Some Munnas are not pagers.
(a) only 3 follows
(b) only 1 and 2 follow
(d) either 2 or 3 follows
(e) None of these

## Syllogisms - 2

Directions for Questions (1-4): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts. Give answer
(A) if only conclusion I follows;
(B) if only conclusion II follows;
(C) if either I or II follows;
(D) if neither I nor II follows and
(E) if both I and II follow.
$\left.\begin{array}{lll}\text { 1. Statements } & \begin{array}{l}\text { Some shirts are biscuits } \\ \text { No biscuit is book }\end{array} \\ \text { Conclusions : } & \begin{array}{l}\text { I Some shirts are books } \\ \text { II. Some books are biscuits }\end{array} \\ \text { 2. Statements }: & \begin{array}{l}\text { No women can vote } \\ \text { Some women are politicians } \\ \text { I Male politicians can vote }\end{array} \\ \text { Conclusions } \\ \text { II. Some politicians can vote }\end{array}\right\}$

Directions for Questions (5-6): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
5. Statements : All rats are cows No cow is white.

Conclusions : I No white is rat.
II. No rat is white
III. Some whites are rats

IV All cows are rats
A) None follows
B) Only I and II follow.
C) Only II and IV follow.
D) Only IV follow
E) None of these

| 6.Statements | All apples are brinjals |
| :---: | :---: |
|  | All brinjals are ladyfingures |
|  | All ladyfingures are oranges |

Conclusions : I. Some oranges are brinjals II.All brinjals are apples III. some apples are oranges IV All ladyfingures are apple
A) None follows
B) All follow
C) Only I and III follow
D) Either I or III follows
E) None of these

Directions for Questions (7-10): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
Give answer
(A) if only conclusion I follows;
(B) if only conclusion II follows;
(C) if either I or II follows;
(D) if neither I nor II follows and
(E) if both I and II follow.
7. Statements : Some papers are files. Some files are pens.

Conclusions : I Some files are not pens.
II. Some pens are papers.
8. Statements : All locks are keys. No key is a spoon

Conclusions : I No lock is a spoon
II. No spoon is a lock
9. Statements : Some bottles are pencils. Some pencils are glasses Conclusions : I No glass is bottle
II. Some bottles are glasses
10. Statements : Sohan is a good sportsman. Sportmen are healthy.

Conclusions: I All healthy persons are sportsmen.
II. Sohan is healthy.

Directions for Questions (11-12): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
11. Statements : All green are blue.

All blue are white.
Conclusions : I Some blue are green III Some green are not white
II. Some white are green
IV. All white are blue.
A) Only I and II follow
B) Only I and III follow. C) Only I and IV follow.
D) Only II and IV follow
E) All follow.

| 12. Statements |  |  |
| :--- | :--- | :--- |
| Conclusions : No parrot is crow. | All crows are bats. |  |
|  | II. All bats bats are parrots |  |
|  | III. Some bats are crows |  |
|  | IV Some bats are not crows |  |
| A) None follows B) Only I and II follow. C) Only I , II and III follow. <br> D) Only II, III and IV follow E) Only III follows  |  |  |

Directions for Questions (13-16): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
Give answer (A) if only conclusion I follows;
(B) if only conclusion II follows;
(C) if either I or II follows;
(D) if neither I nor II follows and
(E) if both I and II follow.

| 13.Statements | : All cars are tables |
| ---: | :--- |
|  | Some children are tables |
| Conclusions | I. Some cars are children |
|  | II. Some children are cars |

14. Statements : Some dog bark

All dogs bite
Conclusions : I. Those dogs who do not bark, also bit.
II. Those dogs who do not bark, not necessary bite.
15. Statements : No magazine is cap All caps are cameras
Conclusions: I. No camera is magazine
II.Some caps are magazines
16.Statements : Lawyersmarried only fair girls
Shobha is very fair

Conclusions : I. Shobha is married to a lawyer.
II. Shobha was not married to a lawyer.

Directions for Questions (17-20): In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
17. Statements : Some coolers are watches No watch is bed
Conclusions : I. No watch is cooler II. No cooler is watch III. Some watches are beds IV. Some coolers are beds
A. None follows
B. Only I and IV follow
C. Only either II or III follows
D. Only either III or IV follows
E. Only either II or IV follows
18. Statements : Some frogs are bricks. All bricks are cakes

Conclusions : I. Some cakes are not frogs.
II. Some cakes are frogs.
III. No cake is frog
IV. All frogs are cakes
A. None follows
B. Only I and II follow
C. Only either I, II andr III follow
D. Only II, III or IV follows
E. Only III and IV follow

Directions (19-28): In each question below are given three Statements followed by three Conclusions numbered I, II and III. You have to take the given Statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given Conclusions logically follows from the given Statements disregarding commonly known facts.
19.Statements:Some cycles are busses. All cars are buses. Some buses are trains.

Conclusions: I. All cares are cycles
II. Some trains are buses.
III. Some trains are cars.
(1) None follows
(2) Only I and II follow
(4) Only II and III follow
(5) None of these
(3) Only land III follow
20. Statements: All pencils are sticks. Some sticks are notes. All diaries are notes.

Conclusions: I. Some notes are diaries.
II. Some sticks are pencils.
III. Some diaries are sticks.
(1) All follow
(2) Only I follow
(4) Only II follows
(5) None of these
(3) Only I and II follow
21.Statements:Some buds are leaves. No leaf is fruit. Some fruits are buds.

Conclusions: I. Some fruits are leaves.
II. All buds are fruits.
III. Some leaves are buds.
(1) Only I or II follows
(2) Only III follows
(3) Only II follows
(4) None follows
(5) None of these
22.Statements:Some birds are animals. All animals are rivers. Some rivers are lions.

Conclusions: I. Some lions are animals
II. Some rivers are birds
III. No animal is lion
(1) Only II follows
(2) Only either I or III follows
(3) I and II follows
(4) Only either II or III follow
(5) None of these
23.Statements:All boxes are pans. Some boxes are jugs. Some jugs are glasses.

Conclusions: I. Some glasses are boxes
II. No glass is box
III.Some jugsarepans
IV. No jug is pan
(1) Only I and II follows
(2) Either I or II and III follows
(3) Only III follows
(4) Either I or II, and either III or IV follow
(5) None of these
24.Statements: All petals are trees. All trees are gardens. All roads are gardens.

Conclusions: I. Some roads are trees.
II. Some gardens are trees.
III. Some gardens are petals.
(1) Only I and II follow
(2) Only II and III follow
(3) Only I and III follow
(4) All I, II and III follow
(5) None of these
25.Statements: All keys are locks. No lock is toy. All bags are toys. Conclusions: I.No bag is key.
II.Some bags are keys.
III.Some toys are keys.
(1)None follows
(2) Only I follows
(4) Only III follows
(5) Only I and II follow
(3) Only II follows
26.Statements: Some days are nights. Some nights are months. Some months are years.

Conclusions: I.Some years are nights
II.Some months are days.
III.No year is night.
(1)Only I follows
(2) Only II follows
(3) Only III follows
(4) Either I or III follows
(5) None of these
27.Statements: All cycles are tyres. Some tyres are wheels. All wheels are buses.

Conclusions: I.Some buses are tyres.
II. Some wheels are tyres.
III.Some buses are cycles.
(1)Only I and II follow
(2) Only I and III follow
(3) Only II and III follow
(4) All I, II and III follow
(5) None of these
28.Statements: Some dogs are cats. Some cats are horses. All horses are tigers.

Conclusions: I.Some tigers are cats. II.Some horses are dogs. III,Some tigers are dogs.
(1)None follows
(2) Only I follows
(3) Only II follows
(4) Only III follows
(5) Only II and III follow

Directions (29-33):In each question below are given three Statements followed by three Conclusions numbered I, II, III and IV. You have to take the given Statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given Conclusions logically follows from the given Statements disregarding commonly known facts.
29.Statements: Some files are folders.

All boxes are bags.
Conclusions: I. Some bags are folders.
III. Some bags are files.
(1)None follows
(2) Only I follows
(4) Only II follows
(5) None of these

Some folders are boxes.
Some bags are trunks.
II. Some boxes are trunks.
IV. Some trunks are folders.
(3) Only III follows
30.Statements: Some letters are words.

Some sentences are paragraphs.

All words are sentences.
No paragraph is a chapter.
(1)Only IV follows
(2) Only III and IV follows
(3) Either II or III follows
(4) Only IV and either II or III follow
(5) None of these
31.Statements: Some curtains are nets.
All holes are windows.

Conclusions: I. Some curtains are partitions.
IV. Some curtains are holes.
(1)Only I and III follow
(2) Either I or II and III follow
(4) Only II and III follow
(5) None of these

All nets are holes.
Some windows are partitions.

## II. Some nets are partitions. <br> III. All nets are windows.

32.Statements: Some coins are metals. Some metals are papers.

Some papers are clothes. Some clothes are apparels.
Conclusions: I. Some apparels are papers.
II. Some clothes are coins.
III. Some apparels are metals.
IV. No cloth is coin.
(1)Only I follows
(4) Only II and IV follow
(2) Either I or III follows
(5) None of these
(3) Either II or IV follows
33.Statements: All chalks are pens. All pens are stands.

No stand is notebook.Some notebooks are books.
Conclusions:
I. No chalk is notebook.
II. No pen is notebook.
III. No chalk is book.
IV. No pen is book.
(1)Only I and II follow
(2) Only III follow
(4) Only II and III follow
(5) None of these

## Exercise -1

Directions (Q 1-15): Given below are the two statements followed by two conclusions. Disregarding commonly known facts, taking statements to be thoroughly true, mark your answer as
(a) If only I follows
(b) If only II follows
(c) If both I and II follow
(d) None follows
1.Statements :All chromes are firefoxes .Some chromes are explorers.

Conclusions: I. All firefoxes are explorers. II. some firefoxes areexplorers.
2.Statements :Some mangoes are bananas. Some banana areapples.

Conclusions :I. Some mangoes are apples II.Some apples are mangoes.
3.Statements :All laptops are desktops. No laptops are tablets.
Conclusion : I. Some desktops arenot tablets.
II. Some desktops are tablets.
4.Statements :All blackberry are iphones. All galaxy are iphones.

Conclusion : I. Some blackberry are galaxy. II.No galaxy is blackberry.
5. Statements :No C++ are Java. Some Sql are C++.
Conclusion :I. Some Sqlarenot Java
II. No Sql is Java.
6. Statements :All locks are keys. All latches are lock
Conclusion :I. All keys are latches.
II.No latches are keys.
7. Statements :No printer is scanner. No Scanner is Xerox.

Conclusion :I.Some printers arenot scanners. II. Some scanners arenot printers.
8. Statements :All engineers are doctors. Some doctors are manager.

Conclusion :I. Some engineers are manager. II.No engineer is manager.
9. Statements :Allvanillas are butterscotches. Some butterscotches arechoco chips.

Conclusion :I. Some vanillas are choco chips. II. No vanilla is choco chips.
10. Statements :Allwatercoolers are ACs. Some DCs are ACs.

Conclusion :I. Some watercoolers are DC. II. No watercooler is DC.
11.Statements : Some Tomatoes are potatoes. All Potatoes are Wafers.

Conclusion :I.Some tomatoes are not wafers is a possibility.
II.All tomatoes being wafers is a possibility.
12.Statements :All Hritiks are hunks. All Salmans are hunks

Conclusion :I.Some Hritiks are salmans is a possibility.
II.All Salmans being Hritiks is a possibility.
13.Statements :Some Tables are Chairs. Some Chairs are Sofas.

Conclusion :I.All Chairs being tables is a possibility.
II.Some tables being sofas is possibility.
14.Statements :Some Misals are pavs. No Pav is Bhaji.

Conclusion :I.All Misals are Bhajis is a possibility.
II.All Bhajis are misals is possibility.
15.Statements :Some Jasmines are Lillys. All Marigolds are Lillys..

Conclusion :I.All Jasmines being Marigolds is a possibility.
II.No Marigold being Jasmine is a possibility.

Directions (Q 16-10): Each question contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.
16. 1.All Dharmas are Pajis
2.AllPajis are kajis .
3.Allkajis are dharams.
4.Somedharams are garams
5.SomeKajis are garam
6.Somepajis are garam
a) 123
b) 345
c) 164
d) 146
17.1.Some Fair areLovelys
2.All Fair are handsome.
3.Some Handsome are Dark.
4.Some Darks are Lovelys.
5.SomeHandsomes are not Lovelys
6. Some fair are dark.
a) 236
b) 125
c) 345
d) 354
18.1. All zandus are balm.
2. Some Tiger are Balms.
3.Some Moves are balms.
4. Some Moves are tigers.
5.SomeZandus are moves.
6. Some moves are not tigers.
a) 234
b) 236
c) 153
d) 135
19.1.Some Havells are Fans
2.AllBajajs are fans.
3.Somebajas are scooters.
4.SomeHavells are Bajajs.
5.All Scooters may be fans.
6. Somehavells may be scooters

1) 142
2) 235
3) 346
4) 124
a) all are true
b) only 1,2 and 3 are true
e) only 2,3 and 4 are true
d) only 2 and 3 are true
20.1. All Jalebis are Imartis
2.Somelmartis are sweet
3.All Sweet are sour.
4.Somejalebis are sweet
5.Someimartis are sour.
6.Some sour are jalebis.
5) 346
6) 235
7) 124
8) 352
a) all are true b) only 1 and 2 follow
c) only 2 and 4 follow
d) None follows

## Exercise - 2

Directions(Q. Nos.1-6): In each question below are three statements followed by two conclusions numbered I and II. You have to take the two/three given statements to be true even, if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
Give answer (a) if only conclusion I follows
Give answer (b) if only conclusion II follows
Give answer (c) if either conclusion I or conclusion II follows.
Give answer (d) if neither conclusion I nor conclusion II follows.
Give answer (e) if both conclusion I and conclusion II follow.

1. Statements :All gliders are parachutes. No parachute is an airplane.

All airplanes are helicopters.
Conclusions :I. No glider is an airplane. II. All gliders being helicopters is a possibility.
2.Statements : All fevicol arefevisticks.No fevistick is feviquick.Some feviquicks are glue. Conclusions :I.Some fevisticks are fevicols. II. Some glues are fevisticks.
3. Statements :Some UPSC are Bank POs.All Bank POs are CET.All CET are SSC. Conclusions: I. Some SSCareBank POs. II. Some SSCareUPSC.
4.Statements :All pendals are rings.

Some rings are chain. All chains are watches. Conclusions :I.Some chains are pendals. II. Some watches are pendals.
5.Statements :Some zensars are 3DPLM. All 3DPLMs are geometric. Some geometrics are mindtrees.
Conclusions :I.Some mindtrees are 3DPLM.
II. Some geometrics are zensars.
6.Statements : Some idioms are words. Some words are phrases. Some phrases are spellings.
Conclusions :I. Some spellings are words II. No spelling is word.
Directions(Q. 7-15): In each question below are four statements followed by four conclusions numbered I, II, II and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
7.Statements :All sticks are rollers. Some rollers are wheels. All wheels are mirrors. Some mirrors are vehicles.
Conclusions:I. Some mirrors are rollers. II. Some mirrors are sticks.
III. Some vehicles are rollers. IV. Some rollers are sticks.
(a) Only I and II follow
(b) Only I, III and IV follow
(c) Only I and IV follow
(d) Only II, III and IV follow
(e) None of the above
8.Statements :Some printers are scanner. All keyboards are joysticks.

Some scanner arekeyboards. All joysticks are plotter.

Conclusions:I.Somejoysticks are printers.
III.Somejoysticks are scanners.
II.Someplotters are scanner.
IV.Somescanner arenot keyboards.
(a) Only I, II and III follow
(b) Only II, III and IV follow
(c) Only I, III and IV follow
(d) All follow
(e) None of the above

All chairs are tables.
All boxes are trunks.
II. All chairs are boxes.
IV. All desks are trunks.
(a) Only I, II and III follow
(b) Only I, II and IV follow
(c) Only II, III and IV follow
(d) All follow
(e) None of the above.
10.Statements:Some 9XMs are Zee. Some Zees are NDTV.

Some NDTVs are pogo.
Conclusions :I. Some filmys are zees.
Some pogos are filmy.
II. No filmy is zee.
III. Some pogos are 9XM.
(a) Only either I or II follows
IV. No pogosis 9XM.
(c) Only either I or II and either III or IV follow
(b) Only either III or IV follows
(e) None of the above
(d) Only I and III follow
11.Statements:All papers are bottles. Some cups are jugs.
Conclusions:I. Some plates are cups.
All bottles are cups. Some jugs are plates.
II. Some plates are bottles.
III. Some cups are papers.
IV. Some bottles are papers.
(a) Only III and IV follow
(b) Only I and II follow
(d) Only II and IV follow
(e) None of the above
(c) Only I and II follow
12.Statements:All bulbs are wires.

Some cables are brushes.
No wire is cable.
Some cables are brushes.
All brushes are paints.
Conclusions: I.Some paints are cables.
II.Some wires are bulbs.
III.Some brushes are wires
IV.Some cables are bulbs.
(a) None follows
(b) Only I and II follow
(c) Only II follows
(d) Only III follows
(e) Only IV follows
13. Statements:All fields are ponds.

Some trees are huts.
Conclusions:I. Some goats are fields.
III. Some goats are trees.

No pond is tree.
All huts are goats.
II. No goat is field.
(a) Only I follows
(b) Only II follows
(c) Only III follows
(d) Only either I or II follows
(e) Only either I or II and III follow
14.Statements:All andues are pandues. Some pandues are dhondues.

Some pandues are hawaldars. No hawaldar is subhedar.
Conclusions: I.Someandues are dhondues.
III.Nodhonduis hawaldar.
II.Somedhondues are hawaldars.
IV.somepanduesarenotsubhedar.
(a) None follows
(b)Only III follows
(c) Only II follows
(d) Only IV follows
(e) either II or III follows and IV follows
15.Statements:All singhams are chewing gums. No chewing gums isbajirao.

Some bajiraoes are bubblegums. Some doublegums are bubblegums.
Conclusions: I.Nosingham is bajirao.
II.Somesinghams are bajirao.
III.Nodoublegum is bajirao.
IV. Somedoublegums are bajiraoes.
(a) only I follows
(b)Only II follows
(c) Only III follows
(d) Only either III or IV follows
(e) Only I follows and either III or IV follows
16.Statements:Some tractors are buses.

Some trains are boats.
Conclusions:I. Some boats are buses
III. Some trains are tractors

All buses are trains.
All boats are ships.
II. Some ships are buses.
IV. Some ships are trains
(a) Only I and II follow
(b) Only I and III follow
(d) Only II and IV follow
(e) None of these
17. Statements: Some pens are knives.

Some pins are needles.
Conclusions: I. Some chains are pins.
III. Some pins are pens.
(a) Only I follows
(b) Only II follows
(d) Only II and III follow
(e) None of these
(c) Only I and III follows

All knives are pins.
All needles are chains.
II. Some needles are knives.
18. Statements: All monkeys are parrots.

No parrot is crow.
Some crows are horses. All horses are tigers.
Conclusions: I. Some tigers are parrots
II. Some crows are monkeys
III. No tiger is parrot
IV. Some horses are parrots
(a) None follows
(b) Only II follows
(c) Only III follows
(d) Only I follows
(e) Only either I or III follows
19.Statements:All work are home

No theater is fun.
Conclusions: I. Somework are theater.
III.Some home arenottheater.

Some home are theater.
Some funs are entertainment.
II.No workistheater.
IV.Some theaters are entertainment.
(a) Only Ifollows
(b) Only II follows
(c) Only either I or II follows
(d) Only either I or II follows and III follows. (e) Only either I or III follows.
20.Statements:Some whatsup are facebook. Some gmail are hike.
Conclusions: I.Some whatsuparegmail.
III.Some gmail are twitter.

Some facebook are gmail.
Some hike are twitter.
II.No whatsup is gmail.
IV.No gmail is twitter.
(a) Only Ifollows
(b) Only II follows
(c) Onlyeither I or II follows
(d) III follows.
(e) Only either I or II follows and either III or IV follows.

## Exercise - 3

Directions (Q 1-10): Each question contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.

1. 1.All countries are planet.
2.Some planet are india.
2. Some planet are earth
4.Some world areIndia
5.All India being countries is a possibility
6.All India are earth.
a) 236
b)632
c) 125
d) 431
2.1.Some cherries are merries.
3. Some cherries are dairies.
3.Nofairies are herries.
4.No cherries isherries.
5.All cherries are fairies.
6.Some fairies are dairies.
a) 562
b) 534
c) 632
d) 123
3.1.Some tabs are capslock.
2.Somecapslocks are ctrl.
3.Someenter are shift.
4. Someshift are backspace.
5.All ctrl being tabs is a possibility.
6.Someenter are backspace.
a) 346
b) 125
c) 462
d) 231
4.1.All fastbackarefirst rack
2.Some first rack are raga
3.Allraga are sonata
4.Someraga are fastback
5.Somefirst rack are sonata.
6.Somesonata are not fastback.
a) 346
b) 236
c) 124
d) 352
5.1. Some harpic are nirma.
2.Somenirma are vimbar.
3.Norin is tide.
5. Some wheel is tide.
5.Someharpic are vimbaris a possibility.
6.All rin are are wheel.
a) 236
b) 125
c) 654
d) 213
6.1.All pillows are cusions.
6. Somecusions are bedsheets.
7. Some pillows being bedsheets is a possibility .
8. No carpet is sofacover.
5.Some mat are carpet.
6.Some mat arenotsofacover .
9. 123
2.245
3.546
4.143
a) only 1
b) only 4
c) only 1 and 3
d) only 2 and 4
7.1. No pulsar is herohonda.
2.Somescooty peps are sunny .
3.Some avengers are pulsar
10. Some sunny are activa.
5.All herohondasbeing avenger is a possibility .
11. Some Scootypep are activa.
a)246
b) 135
c) 136
d) 546
8.1.Some Kolhapur are not pune.
2.Somenashik are sangli.
3.Allsangli are goa .
12. Allnagpur are kolhapur.
5.Somenashik are goa.
13. No nagpur ispune .
14. 461
2.325
3.125
4.165
a) only 1
b) only 2
c) only 1 and 2
d) none follows.

Directions(Q. 9-15): In each question below are four statements followed by four conclusions numbered I, II, II and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
9.Statements:All furniture are jungles. No jungle is road. Some roads are hills. Conclusions:I. Some roads are furniture. II. Some jungles are furnitures. III. Some hills are jungles.
(a) Only I follows
(b) Only II follows
(c) Only III follows
(d) Only I and II follow
(e) None of the above
10. Statements:Some ice are rings. No ring is paint. Some rings are gold Conclusions:I. No gold is paint.
II. No ice is gold.

## III. Some rings are paints.

IV.Allgolds are ring
(a) Only I and III follows
(b) Only I and II follows
(d) Only II and III follows
(e) None of the above
(c)Only III and IV follows
11.Statements:Some Vindra are Windra. Some Windra are Anamitra. Some Anamitra are sitara. Conclusions:I. Some sitara are Vindra. II. Some sitara are windra.
III. No sitara is Windra.
(a) None follows
(b) Only II follows
(c) Only III follows
(d) Only either II or III follows
(e) Only I and either II or III follow
12. Statements:All bunties are bublies. No bublies are kajrares. Someaishwaryaarekajrares. Conclusions:I.Somebunties are kajrare.
II.No bunty is kajrare.
III.Some bublies are bunties.
(a) None follows
(b) Only I follows
(c) Only III follows
(d) Only II follows
(e) Only II and III follow.
13. Statements:No oxygen is nitrogen .All Carbon are oxygen. Some oxygen are hydrogen. Conclusions:I.All carbon being hydrogen is a possibility. II.No carbon is nitrogen. III. Some oxygen are carbon.
(a) None follows
(b) Only I follows
(c) Only III follows
(d) Only II follows
(e) All follow.
14.Statements: No candle is bell.Some shoes are bells.All tables are shoes. Conclusions:I. Some tables are bells. II. No table is bell. III. Some shoes are Candles.
IV.No shoes are candles.
(a) Only I and III follows
(b) Only III and IV follows
(c) only III follows
(d)Either I or II follows and Either III or IV follows . (e) None of the above.
15. Statements: All Litchi are peach. No peach is cheery.
Some cherry are pear. All pear are kiwi.

Conclusions:I.Some kiwi are cherry. II.Some peach are Litchi.
III.Some peararepeach IV.Some cherry are litchi.
(a) None follows
(b) Only I and II follow
(d) Only III follows
(e) Only IV follows
(c) Only II follows

Directions(Q. 16-20): In each question below are four statements followed by four conclusions numbered I, II, II and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
16.Statements:All kings are warriors. All soldiers are warriors.

All sentries are warriors. Some sentries are soldiers.
Conclusions:I. Some sentries are kings.
III.Some warriors are sentries.
(a) Only either I or III follows
(b) Only I follows
(d) Only II and III follow
(e) None of these.
17.Statements:Some birds are goats. Some goats are horses.

Some horses are lions. Some lions are tigers.
Conclusions:I. Some tigers are goats.
II. No tiger is goat.
III. Some lions are birds.
IV. No lion is bird.
$\begin{array}{ll}\text { (a) Only either I or II follows } & \text { (b) Only either III or IV follows }\end{array}$
(c) Only either I or II and either III or IV follow (d) Only I and III follow(e) None of the above
18.Statements:Some letters are glasses. All plates are buses.
Conclusions:I. Some cars are letters. Some glasses are plates. All buses are cars.
III.Some buses are glasses.
(a) Only I and II follow
(b) Only I and III follow
(d) Only III follows
(e) Only II and III follow
19. Statements:Some benches are walls. Some houses are jungles.
Conclusions:I. Some roads are benches.
III. Some houses are benches.
(a) Only I and II follow
(b) Only I and III follow
(d) Only II, III and IV follow
(e) None of the above

All walls are houses.
All jungles are roads .
II. Some jungles are walls.
IV. Some roads are houses.
(c) Only III and IV follow

All privates are corporate.
All companies are government .
II. All private are company.
IV. Some privates are socials.
(a) none follow
(b) Only I and III follow
(d) Only II, III and IV follow
(e) all follow.
(c) Only III and IV follow

## Exercise - 4

Direction (Q. 1-10) :In each question below are four statements followed by four conclusions numbered 1, 2, 3 and 4 . You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
1.Statements : No Dove are Loreal.

Some Pantenes are Sunsilk.
Conclusion :1.Some Doves are Sunsilk.
3.No dove is Kesh king.

All Doves are Pantene.
All Sunsilks are Kesh king.
2.SomepantenesarenotLoreal.
4.Somekeshkings are Pantenes.
(a)Only 1 follows
(b) Only 2 follows
(d) only 4 follows
(e)only 2 and 4 follow.
(c) only 2 and 3 follow
2.Statements : Some hairbelts are bobpins.

No clutcher is bracelet.
Conclusion :1. Some hairbelts are clutchers.
3. Some tip tops are not cluchers.
(a)None of these
(b) Only 2 follows
(d) only 4 follows
(e)only 2 ,3 and 4 follow
3. Statements:All Google are Bing. Some Ask are Search.
Conclusion:1. All Google being Ask is a possibility.
2.Some Bing being Search is a possibility. 3.Some Ask arenot Enter.

Somebobpins are clutchers.
Some bracelets are tiptop pins.
2. Some bob pins are not bracelets.
4.Some bob pins are not clutchers.
(c) only 2 and 3 follow

Some Bing are Ask. No Search are Enter.
(a)None of these
(b) Only 1follows
(d) only 4 follows
e) All follow
4. Statements:.No birds are animals.

No human being is dolphin.
Conclusion:1. All birds are human being.
3.All aliens are dolphin.
(a)only2 follows
(b) Only 1follows
(d) only 4 follows
(e) All follow
5. Statements :All plane are aircraft.

No helicopters are airline.
Conclusion:1. All planes are helicopter.
3. All aircraft are airlines.
(a)None of these
(b) Only 1follows
(d) only 4 follows
(e) None follows
6. Statements :Some kamlies are gamlies .

Some emlies are vimlies.
Conclusion : 1. Some kamlies are emlies.
3. Some emlies are jamlies. 4.Some kamlies being jamlies is a possibility.
(a)None of these
(b) Only 1 follows
(d) only 4 follows
(e) All follows.
(c) only 2 and 3 follow

Some gamlies are emlies.
Some vimlies are jamlies.
2.Some gamlies are vimlies.
2.Some airlines are helicoters.
4.Some helicopter arenot Aircraft.
(c) only 2 and 3 follow

Some Aircraft are helicopters.
All airlines are aircraft.
All human being are aliens
2.Some animalsarenot dolphin.
4.Some animals arenotbirds.
(c) only 2 and 3 follow
7. Statements :Allvatikas are almond oil.

All parachutes are kesh king.
Conclusion :1.All vatikas are ashwini.
3. All almond oils are ashwini.
a)None of these
b) Only 2 follows
d) only 4 follows
e) All follow

All almond oils areparachute.
All kesh kings are ashwini.
2.All almond oils are kesh king.
4.All vatikas are parachute.
c) only 2 and 3 follow

All pencell areVoltas.
All Powerare Philips
2. All Batteries are Philips.
4. Some Pencell arenot Batteries.
c) only 2 and 3 follow

All steps are floors.
Some elevators are lift.
2. Some floors are steps.
4. Some floors are lift .
$\begin{array}{ll}\text { d) only } 3 \text { follows } & \text { e) only } 4\end{array}$
a)None of these
b) Only 1 follows
c) only 2 follows follows.
10.Statements :.Some cameras are mobiles.

No mobile is calculator.
Some calculators are pendrives.
All pendrives are tabs.
Conclusion :1.Some cameras arenot calculators.
3. Some calculators are tabs 4 All mobiles being camera is a possibility.
a) None of these
b) All follow
d) only 3 follows
e) only 2 , 3 and 4 follows.
c) only 2 follows

Direction (Q. 11-20) :In each question below are four statements followed by two conclusions numbered 1 and 2. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) is correct and indicate it on the answer sheet
11.Statements :.All salman are govinda.Somesalman are shahrukh. No shahrukh is vivek Conclusion :1.Somegovindaarenotshahrukh.
2. Some salmanarenotvivek.
a)None of these
b) only 1 follows
c) only 2 follows
d) both 1 and 2 follow.
12.Statements :.Some luxs are dove. Some doves are medimix.Some medimixs are vivel. Conclusion :1.Someluxs are medimix. 2. Some dovesarenotvivel.
a)None of these
b) only1 follows
c) only 2 follows
d) either 1 or 2 follows.
13.Statements :.No CAT is CET. No CET is CMAT .No CMAT is SNAP

Conclusion :1.No CAT is CMAT.
2. No CET is SNAP .
a)both 1 and 2 follows
b) only1 follows
c) only 2 follows
d) Neither 1 nor 2 follows.
14. Statements :Some ballpens are gel pens.Some gel pen are inkpen. All inkpens are markers.
Conclusion :1.Someballpens are ink pens .
2. Some markers arenot gel pen .
a)None follows
b) only1 follows
c) only 2 follows
d) either 1 or 2 follows.
15.Statements :No coffee is tea. Some tea are milk. All milk are dairy. Conclusion :1.Some dairy are milk . 2. Some milk are coffee .
a)Both follow
b) only 1 follow
c) only 2 follows
d) either 1 or 2 follows.
16.Statements :All schools are college. All universities are colleges.

No colleges are institutes.
Conclusion :1.Some schools are university . 2.Some universities are institutes.
a)None follows
b) only 1 follow
c) only 2 follows
d) either 1 or 2 follows.
17.Statements :All sky are blue. Some blues are chairs. No sky is heaven.

Conclusion :1.Some sky are chairs .
2. No sky are chair.
a)None follow
b) only 1 follows
c) only 2 follows
d) either 1 or 2 follows.
18.Statements :All hands are legs. All legs are fingers. All fingers are nails. Conclusion :1.All hands are fingers . $\quad$ 2. Some nail are fingers.
a)All follow
b) only1 follows
c) only 2 follows
d) either 1 or 2 follows.
19.Statements :Some cows are mouse. No mouse is crow. Some crow is buffalo. Conclusion :1.Some cows arenot crow . 2. Some cows are buffalo.
a)All follow
b) only1 follows
c) only 2 follows
d) either 1 or 2 follows.
20.Statements :All actors are doctors. Some actors are manager. No manager is teacher.

Conclusion :1.Some doctors arenot manager .
a)All follow
b) only1 follows
c) only 2 follows
d) either 1 or 2 follows.
2. Some actors arenot teacher.

## Exercise - 5

Directions (Q 1-10): Given below are the two statements followed by two conclusions. Disregarding commonly known facts, taking statements to be thoroughly true, mark your answer as
(a) If only I follows
(b) If only II follows
(c) If both I and II
follow
(d) either I or II follows (e) None follows
1.Statements :Some Maharashtra banks are SBI . All Central banks are SBI .

Conclusions :I.Some Maharashtra banks are Central banks.
II.No Maharashtra banks are Central banks
2.Statements :All glasses are mirror.All water are mirror.

Conclusions :I.Some glasses are water.
3.Statements :Every head is tail. Some tails are coin. Conclusions :I.Some heads are coin.
4.Statements :All husbands are wife . No husband is child.

Conclusions:I.All wives being children is a possibility.
II.All children being wives is a possibility
5.Statements : All hathis are chitis . No hathi is small.

Conclusions:I.Some small are not chitis.
6.Statements : Some Dosas are vadas. Some vadas are not chatnis Conclusions:I.Some Dosas are chatnis.
II. No Dosa is chatni.
7.Statements : Some Pink are white. All pink are black. Conclusions:I.Some black arenot white.
II. All black are white.
8.Statements : Some JimJam is Bourbon. Only Britannias are Bourbons. Conclusions:I.Some Jimjams are Britannias II. Some Britannias are not Jimjams
9.Statements: Some Bingos are Lays. All Lays are not Kurkures.

Conclusions:I.Some Bingos are Kurkures
II. No Bingo is Kurkure
10.Statements : No show is ramp. No ramp is attitude. Conclusions:I.No show is attitude.
II. All Shows are attitude

Direction (Q.11-16) :Each question contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.
11.1.All books are notebook.
2.Some notebooks are classmate.
3.Some notebooks are converge.
4. Some classmate being converge is a possibility.
5.All bags are books.
6. Some notebooks are bags.
1.123
2.345
3.234
4.156
a) only 1 follows
b) only 2 follows
c) only 2 and 3 follows
d) only 3 and 4 follows
12. 1.Some Airtels are BSNL.
2. No BSNL is Vodaphone.
3.SomeVodaphone are Uninor.
4. Some Airtels beingVodaphone is a possibility.
5.All Reliance are Vodaphone.
6. Some Reliance are BSNL.
a) 562
b) 345
c) 234
d) 124
13.1.Some copies are notebooks
2. All books are copies.
3. Some News papers are plastics.
4.Some notebooks are books.
5. No news paper is homework.
6. Some plastics arenot homework.
a) 124
b) 456
c) 356
d) 234
14. 1.No bold is Arial.
2. Some italics are bold.
3.Some italics are Arial.
4.Allcalibri are underline
5.Nokaiti is Times New Roman.
6. Some Cambria are corbel.
a) 123
b) 356
c) 234
d) None follows
15.1.Some mobile are cell phone.
2.All mobiles are tabs.
3..Noipad is pointer.
4. Noipad is projector
5. Some tabs are not cell phone
6. No pointer being projector is a possibility.

1. $125 \quad 2.256$
3.346
2. 431
a)only 1 and 2 follow
b) only 1 and 3 follow
c) only 2 and 4 follow
d)only 2 and 4 follow
3. 1.All trees are leaves.
2.Some leaves are steams.
4. All branches are animals.
4.Some branches are roots
5.Some animals are not roots.

6 . Some trees being steams is a possibility.
$1.562 \quad 2.345$
3.126
4.123
a)only 1 and 2 follow b)only 1 and 3 follow
c) only 2 and 3 follow
d)only 2 and 4 follow

Directions(Q. 17-20): In each question below are four statements followed by four conclusions numbered I, II, II and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
17. Statements:Some colleges are hostel. No hostel is office . All offices are institutes. Conclusions:I. No hostel is institute. II. Some hostels are offices. III. Some hostels are institutes. IV. Some offices are collages.
a) Only I follows
b) Only II and III follow
c) Only IV follows
d) Only either I or III follows
e) None of the above
18.Statements:Some Perks are chocolates. All 5 stars are crunchy.

Some Chocolates are Crunchy
Conclusions:I. Some perks are crunchy.
III. No perk is 5 star.
a) only either I or IV and either II or III are true
c) onlyeither II or III is true
II. Some perks are 5 stars. IV.All Perks may be crunchy.
b) only either II or III and IV are true
d) None of these
19.Statements:No onion is garlic. Some ginger are garlic No ginger is paste.

Conclusions: I.Some ginger are not onion III.No onion is paste.
a) only either III or IV is true.
II.some onion are not ginger.
IV.some onions are paste.
c) only either III or IV and I is true.
20.Statements:Teachers are often strict. Some strict are humorous. No humorous are villians

| Conclusions:I.Some Teachers are villians . | III. Some teachers are humorous. |
| :--- | :--- |
| a) Either I or IV and either II or III follow IV.No Teacher is villian. <br> c) only either I or IV follows b) either I or IV and II follow | d) none of these. |

## Exercise - 6

Directions(Q. 1- 20): In each question below are four statements followed by four conclusions numbered I, II, III and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and than decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
1.Statements:All Gagan are Magan. No Magan is Chalan. Some Chalan are Badan. Conclusions :I. Some Gagan are not Chalan.
II. Some Badan are not Magan.
III. Some Gagan are Badan.
(a) Only I follows
(b) Only II follows
(c) Only I and Ilfollows
(d) Only III follow
(e) None of the above
2.Statements :.Some Alligation are Mixture. Some Mixtures are Profit .Some Profit are Loss.
Conclusion :I. Some Alligation are Profit.
II. No Alligation is Profit.
III. Some Loss are not Profit.
a) None of these
b) only I follows
c) only III follows
d) either I or II follows
3.Statements :All Square are Rectangle. All Rectangle are Triangle. All Triangle are Cone. Conclusions :I. AllTriangle are Square.
II. Some ConeareRectangle.
III. AllSquareareCone.
a) Only either I or III follows
b) Only I follows
c) Only II follows
d) Only II and III follow
e) All of these.
4.Statements: All academy are institute. Some institute are management. No management is tuitions
Conclusions:I. Some academy are not management.
II.Some institute are not tuitions.
III. All institutes are tuitions.
a)All follow
b) only1 follows
c) only 2 follow
d) either 1 or 2 follows.
5.Statements :Some cats are tigers. All lions are cats. Some horses are lions. Conclusions:I. Some lions are tigers.
II. No horse is tiger.
III. Some horses are cats.
a) None follows
b) Only III follows
c) Only I and II follow
d) either I or II follow
e) None of the above
6.Statements :Some crocodiles are tears. Some tears are fake. All crocodiles are deadly. Conclusions:I.Some tears are deadly.
II.Some deadly are not tears. III.Some fake are not deadly.
a) None follows
b) Only III follows
c) Only I and II follow
d) either I or II follow
e) None of the above
7.Statements :Some lens are carts. No flip is cart. All Quickers are carts. Conclusions:I.Some lens are quicker.
II.Some lens are flips.
III.Some lenses are not flips.
a) None follows
b) Only I and II follow
c) Only III follows
d) either I or II follow
e) None of the above
8.Statements :Mercs are classy. All BMWs are classy. No cheap is classy.

Conclusions:I.Some Mercs are BMWs .
II.No BMW is cheap.
III.No Mercs are BMWs
a) None follows
b) Only III follows
d) Only either I or III follow
e) None of the above
c) Only I and II follow
9.Statements :All Chinese are hakkas. No hakkas are sukkas. Some Chinese are noodles. Conclusions:I.Some Chinese are not sukkas.
II. Some hakkas are noodles.
III. No hakka is noodle
a) None follows
b) Only II follows
c) Only I and II follow
d) either I or II follow
e) None of the above
10.Statements: Some Savera are bahara. All kabir are fakira. Some fakira are savera. Conclusions:I.Some fakira being bahara is a possibility.
II. Some kabir are Savera.
III.Some bahara are kabir.
a) None follows.
b) Only Ifollows.
c) Only I and II follow.
d) either I or III follow.
e) None of the above.
11. Statements:Some farmers are landlords. All landlords are labours. Some labours are merchants.
Conclusions:I. Some labours are farmers.
II. Some merchants are farmers.
III. Some merchants are landlords.
IV. Some landlords are farmers.
a) None follow
b) Only IV follow
d) Both I and IV follows
e) All follow
c) Only I follow
12. Statements:Some dogs are bags.No bag is lion.All rooms are lions.

Conclusions:I. Some rooms are bags.
II. Some dogs are lions.
III. Some rooms are dogs.
a) All follows
b) Only I follows
c) Only II follows
d) Only III follows
e) None of these
13. Statements:All rings are birds. Some birds are cages.All cages are kites. Conclusions:I. All kites are cages.
II. Some kites are rings.
III. Some birds are kites.
a) Only I follows
b) Only II follows
d) Only I and II follow
e) None of these
14. Statements:Some rings are phones. Some phones are computers.

Some computers are stations.
Conclusions:I. Some stations are rings.
II. Some phones are stations.
III. Some computers are rings.
IV. All rings are stations.
a) None follows
b) Only I and II follow
c) Only I, II and III follo
d) Only II and III follow
e) All follow
15. Statements:No paper is pen. No pen is pencil. All erasers are papers.

Conclusions: I. Some papers are erasers
II. No pencil are eraser
III. No pen is eraser
IV. ALL papers are erasers
a) All follows
b) Only I and III follows
c) Only I, II and III follo
d) Only II and III follows
e) None of these
16. Statements:Some buses are rivers.All rivers are mountains. Some roads are mountains.

Conclusions:I. Some mountains are buses. II. Some roads are buses.
III. Some roads are rivers.
IV. Some mountains are roads.
a) All follow
b) Only II, III and IV follow
d) Only I and IV follows
e) None of these
c) Only III and IV follows
17. Statements:Some disciplines are preachers.

Some saints are not disciples.
Conclusions:I. Some saints are disciples. III. All preachers are disciples.

All preachers are saints.
II. All disciples are saints. IV. No Saint is disciples.
a) No follows
b) Only I follows
d) Only II and III follow
e) All follow
c) Only I and III follow
18. Statements:All oceans are rivers. Some springs are rivers. All wells are springs. Conclusions:I. Some springs are oceans.
II. Some wells are rivers.
III. Some rivers are oceans.
IV. No well is river.
a) Only either II or IV and III follow.
b) Only either II or IV and I follow
c) Only either I or III and IV follow.
d) None follows
e)All follow
19. Statements:Some buses are houses. All houses are taxis.All rickshaws are taxis. Conclusions:I. Some rickshaws are houses.
II. Some taxis are houses.
III. Some taxis are buses.
a) None follows
b) Only I follows
d) Only II and III follow
e) All follow
c) Only II follows
20. Statements:Some pens are books. All schools are books.Some colleges are schools. Conclusions:I. Some colleges are pens.
II. Some pens are schools.
III. Some colleges are books.
a) All follows
b) Only I and II follows
c) Only II and III follow
d) Only III follows
e) None of these

## Exercise-7

Directions (Q 1-5): Given below are the two statements followed by two conclusions. Disregarding commonly known facts, taking statements to be thoroughly true, mark your answer as
(a) If only I follows
(b) If only II follows
(c) If both I and II follow
(d) If either I or II follows
(e) None of these
1.Statements : All papers are pencil . No pencil is eraser.

Conclusions :l. No paper is eraser .
II. No eraser is paper.
2. Statements :All cookies are pastry. All pastries are cake.

Conclusions :I. All cookies are cake.
II. Some pastries are not cake
3.Statements :No bread is jam. Some jam arebutter.

Conclusion :I. No bread is butter.
II. Some butter are not bread.
4.Statements :All cards are greeting. Some greetings arehappy.

Conclusion :I.All cards being happy is a possibility.
II. All happy being cards is a possibility.
5. Statements :No rock is stone . No stone is soil.

Conclusion :I. Some rock are not soil.
II. Some soilarenotrock.
6. Statements :All windows are mirror . No mirror is magnet. Conclusion :I. No magnet is window
II. No window is magnet.
7. Statements :Some years are days. Some days are month.

Conclusion :I. Some years are not months. II. No month is year.
8. Statements :Every school is collage . Every collage is university.

Conclusion :I. All schools are university. II. Some universities are school.
9. Statements :Some eyes arenot nose. All noses are ear.

Conclusion :I. Some ear are nose.
II. Some ear arenot eyes.
10. Statements :No rain is waterproof. All rain are raincoat.

Conclusion :I.Some raincoat arenot waterproof.
II. No waterproof is DC.

Directions(Q. 11-15): In each question below are four statements followed by four conclusions numbered I, II, II and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (a), (b), (c), (d) and (e) is correct and indicate it on the answer sheet.
11.Statements:All bulbs are lamp. Some lamps are tubelight. No tubelight is LED.

Conclusions:I. Some bulbs are tubelight.
III. All bulbs being tubelight is a possibility.
(a) Only I follows
(b) Only II and III follow
(d) II and Iv follow
(e) None of the above
12.Statements:All levis are lifestyle. Some lifestyle arevermoda. Some vermoda are Denim.

Conclusions:I. Some levis are vermoda.
III.Somevermodaarenot denim.
II.Some lifestyles are denim.
IV.Allvermoda may be lifestyle.
(b) only I and IV follow
(d) only III and IV follow
is LG. No LG is Toshiba.
II. Some Philips are Toshiba .
IV. Some philips are whirphool.
(b) only III and III is true.
(a) only I is true.
(c) only I and IV true.
(d) None of these.
14.Statements:Fridge are often washing machine. Some washing machine are Iron. No Iron are grinder.
Conclusions:I.Some fridges are Iron . II. Some Iron are washing machine.
III. All washing machine being fridge is a possibility. IV.No grinder is Iron.
(a)Either I or IV and either II or III follow
(b) only II,III and IV follow
(c) only III and IV follow
(d) none of these.
15.Statements:No English is Hindi. All Hind are Marathi. SomeMarathiareSanskrit. Conclusions: I. Some Sanskrit are Hindi
II. Some Marathi are not English.
III. Some English are Sanskrit .
IV. No Sanskrit are Hindi
(a) None follows
(b) Only I follows
(d) Only II follows
(e) Only II and III follow.
(c) Only III follows
16.Statements: No crows is buffaloes .Some buffaloes are cows .All ship are cows. Conclusions:I. Some cows are crows.
II. No crow is cows.
III. Some ships are buffaloes. IV. No ship is buffaloes.
(a) Only I and III follows
(b) Only III and IV follows
(c) only III follows
(d) Either I or II follows and Either III or IV follows.
(e) None of the above.
17. Statements: All Sandwich are breakfast. No breakfast is bread. Some breadare cheese. Conclusions:I.Some Sandwich are not bread.
II.Somecheese are breakfast.
III.No bread is breakfast.
IV. Some cheese arenot bread.
(a) None follows
(b) Only I and III follow
(d) Only III follows
(e) Only IV follows
(c) Only II follows
18.Statements: Some tools are radios. Some radios are ponds. Some ponds are mirrors.
Conclusions:I. Some mirrors are tools.
II. Some tools are ponds
III. Some radios are mirror.
V. Some mirrors are radios.
(a) None follows
(b) Only I follows
(d) Only III follows
(e) Only IV follows
(c) Only II follows
19.Statements:All rooms are baskets. All baskets are tyres. Some tyres are lanterns.

Conclusion:I. Some lanterns are rooms
II. Some tyres are rooms
III. Some baskets are rooms
IV. All tyres are baskets
(a) Only I, II and III follow
(b) Only II and III follow
(d) All I, II, III and IV follow
(e) None of the above
(c) Only I, III and IV follow
20.Statements: Some tractors are buses. All buses are trains. Some trains are boats.

Conclusions:I. Some boats are buses
III. Sometractorsaretrains
$\begin{array}{ll}\text { (a) Only I and II follow } & \text { (b) Only I and III follow } \\ \text { (d) AII I, II, III and IV follow } & \text { (e) None of the above }\end{array}$
(d) All I, II, III and IV follow
(e) None of the above
II. Some trains are tractors.
IV. Some buses are boats.

## Exercise-8

Direction (Q.1-10) :Each question contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.
1.1.Some vista are not window 8.
2. All vista are windows 7 .
3. No window 7 is window 8.
4.Some window XP are MC OS .
5.All window XP are Linux.
6.All MC OS are Linux.
a) 231
b) 563
c) 234
d) None follows
2.1.Allparagraph are margin.
2.Some margin are page layout.
3.Some insert are view.
4.Some paragraph being page layout is a possibility.
5.All view are reveiw.
6. Some reveiw are insert.
1.123
2.536
3.124
4.156
a) only 1 follows
b) only 2 follows
c) only 2 and 3 follows
d) only 3 and 4 follows
3.1.Some Airtels are BSNL.
2.No BSNL is Vodaphone.
3.SomeVodaphone are Uninor.
4.Some Airtels beingVodaphone is a possibility.
5. All Reliance are Vodaphone .
6. Some Reliance are BSNL .
a) 562
b) 345
c) 234
d) 124
4.1.Some copies are notebooks
2. All books are copies.
3. Some Newspapers are plastics.
4.Some notebooks are books.
5. No newspaper is homework.
6. Some plastics are not homework.
a) 124
b) 456
c) 356
d) 234
5. 1.Some mobile are cell phone.
2. All mobiles are tabs.
3. Noipad is pointer.
4.Noipad is projector
5. Some tabs are not cell phone
6. No pointer being projector is a possibility.

1. 125
2.256
2. 346
3. 431
a)only 1 and 2 follow
b) only 1 and 3 follow
c) only 2 and 4 follow
d) only 2 and 4 follow
4. 1.All trees are leaves.
2.Some leaves are steams.
5. All branches are animals.
4.Some branches are roots
6. Some animals are not roots.

6 . Some trees being steams is a possibility.
1.562
2. 345
3.126
4. 123
a)only 1 and 2 follow b) only 1 and 3 follow c) only 2 and 3 follow d) only 2 and 4 follow
7. 1.All institutes are CAs .
2.Some CAs are Academy.
3.Some Academy are institutes.
4.Some centres are Hotel.
5. No Hotel is woodland.
6. Some centres are not woodland.
a) 123
b) 124
c) 456
d) 643
8.1.No coffee is tea.
2. No tea is milk.
3. Some coffee are tea.
4. No coffee is milk.
5. Some milkshakes are not milk.
6.Some milkshakes arenot coffee.
a) 124
b) 456
c) 325
d) 123
9. 1.All horlicks are bournvita.
2. Some bournvita are not complan.
3. No bournvita is chocolate.
5. Some horlicks are complan.
6.Some complan are not chocolate.
1.123
2.236
3.152
4.235
a) only 1 follows
b)only 2 follows
c)only 2 and 3 follows
d)only 3 and 4 follows.
10.1.Some analytical are logical.
2.All analytical are verbals.
3. No analytical is reasoning.
4. Some logical are verbal.
5.Some verbals are not reasoning.
1.214
2.235
3.152
4.145
a) 1
b)2
c)only 1 and 2 follows
d)only 3 and 4 follows.
11.Statements : All Lux are Vivel. Some Lux are Dettol. No Dettol are Lifeboy. Conclusion :1.Some Vivel are not dettol.
2.Some lux are not lifeboy.

## 3. Some dettol are not Vivel.

4. Some dettol are Lux.
a) only 1
b) only 2
d)only 1,2 and 4
e)None of these
c) only 1 and 3
5. Statements: No maternal is grandpa. No grandpa is grandchildren.

Some Grandma is grandpa.
Conclusion:1.No grandpa is maternal.
2.Some grandma isnot grandchildren.
3. Some grandchildren are not grandpa.
a) only 1
b) only 2
c) only 3
d)only 1 and 2 follows
e) None of these
13.Statements: All railway are bus. Some bus are truck. Some trucks are bike.

Conclusion :1.All railway is being truck is a possibility .
2.All buses are bike is a possibility.
3. Some trucks are not bike.
a) only 1
b) only 2
c) only 3
d) all of these
e)None of these
14. Statements: Every bottle is cap. Every cap is toothbrush. Every water is toothbrush. Conclusion:1.All bottles are toothbrush.
2.All Caps are water.
3. Some toothbrushes are water.
a) only
b) only 2
c) only 3 and 2
d) only 1 and 3
e)None of these
15. Statements: Some highways are not road. Some road are not footpath.

Some footpath are not flyover.
Conclusion:1. Some highways are footpath. 2. Some roads are flyover.
3. Some flyover are footpath.
a) only 1
b) only 2
c) only 3
d) only 2 and 3
e)None of
these
16. Statements: All angry are birds. Some birds are animals. No animal is human being.

Conclusion:1. Some angry are animals.
2. Some birds are human being.
3. Some angry are human being.
a) only 1
b) only 2
c) only 3
d) only 2 and 3
e) None of these
17. Statements:Every golds are silver. Some silvers are copper .

Some coppers are platinum
Conclusion:1. Some coppers are golds. 2.Some Platinums are Silver.
3. Some golds are platinum.
a) only 1
b) only 2
c) only 3
d) only 2 and 3
e)None of these
18. Statements: Some SNAP are CET. No CET are CMAT. Some CMAT are IIFT.
Conclusion:1.Some SNAP are not CMAT.
2. Some IIFT are not CET.
3. Some IIFT are CMAT.
a) only 1
b) only 2
c) only 3
d) only 2 and 3
e)All follows
19. Statements: Some Red are blue. All blue are pink.All pink are white.

Conclusion:1.Some pink are red. 2.Some red are not pink. 3. Some blue are white.
a) only 1
b) only 2
c) only 1 and 3
d) only 2 and 3
e)All follows
20. Statements: All shopping are online. All onlines are offlines.

Some offlines are window shopping.
Conclusion:1.All shopping are offlines. 2.Some onlines are windows shopping.
3. All windows shopping can be offlines.
a) only 1
b) only 2
c) only 1 and 3
d) All follows
e)None of these
21. Statements: Every scooter are Honda.Some Honda are yamaha. No Yamaha is Suzuki.

Conclusion:1.All scooter are yamaha.
2.Some Honda are not Suzuki.
3.Some Honda are not yahama.
a) only 1
b) only 2
c) only 3
d) only 2 and 3 follows
e)None of these
22. Statements: No sandwich is bread. Some bread is burger.Every burger is hamburger. Conclusion:1.Some Burger arenot Sandwich.
2.Some hamareburger not bread.
3. No bread is sandwich.
a) only 1
b) only 2
c) only 3
d) All follow
e)None of these

## Exercise -9

1. Statements: No sandwich is bread. Some bread is burger.Every burger is hamburger.

Conclusion:1.Some burger arenot sandwich. 2.Some bread arenot burger.
3. No bread is sandwich.
a) only
b) only 2
c) only 3
d) only 1 and 2 follows
e)All of these
2. Statements: No box is lunch. No lunch is break. All breaks are fast.

Conclusion:1.No box is break. 2.Some fast arenot lunch.
3. Some fast are lunch. 4.No box is fast.
a) only 1
b) only 2
c) only 3
d) only 4
e)None of these
3. Statements:All benches are cots. No cot is lamp. Some lamps are candles.
Conclusion: 1. Some cots are benches.
2. Some candles are cots.
a) only 1
b) only 2
c) both 1 and 2
d) either 1 or 2
e)None of these
4.Statements : Some cats are dogs. All dogs are goats. All goats are walls. Conclusions: 1 . Some walls are dogs.
2. Some walls are cats
a) only 1
b) only 2
c) both 1 and 2
d) either 1 or 2
e)None of these
5.Statements:All lux are vivel. Some lux are Dettol.Nodettol are lifeboy.

Conclusion:1.Some vivel arenot dettol.
2.Some lux arenotlifeboy.
3.Some Dettol arenotvivel.

4 .Some dettol are lux.
a) only 1
b) only 2
c) only 1 and 3
d) only 1,3 and 4
e) None of these

Directions(Q. 6-10): In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
6.Statements: Some pencils are windows. All windows are roads.

Some roads are cups. All cups are chains.
Conclusions: I. Some chains are pencils. II. Some cups are pencils.
III. Some chains are windows.
IV. Some roads are pencils.
a) None follows
b) Only II follows
c) Only IV follows
d) Only III and IV follow
e) Only III follows
7. Statement: Some beds are mirrors. Some mirrors are dolls.

Some dolls are cheques. Some cheques are pins.
Conclusions:I. Some pins are dolls.
III. Some cheques are mirrors.
II. Some cheques are beds.
IV. Some dolls are beds.
a) None follows
b) Only I follows
d) Only III follows
e) Only IV follows
8.Statements:All chocolates are holders. No holder is lamp.

Some lamps are desks. All desks are pens.

Conclusions:I. Some pens are holders.
II. Some desks are lamps.
III. No pen is holder.
a) Only I follows
b) Only II follows
c) Only III follows
d) Only either I or III follows
e) Only either I or III and II follow
9.Statements: All glasses are rooms. Some rooms are planes.

All planes are ducks. Some ducks are lanterns.
Conclusions:I. Some lanterns are planes. II. Some ducks are rooms.
III. Some rooms are glasses. IV. Some ducks are glasses.
a) Only I and II follow
b) Only II and III follow
d) AII, I, II, III and IV follow
e) None of the above
c) Only I, II and III follow
10.Statements: Some chairs are tents. Some tents are jugs.

All jugs are glasses. All glasses are pots.
Conclusions:I. Some pots are tents. II. Some pots are chairs.
III. Some glasses are chairs. IV. Some glasses are tents.
a) Only I and II follow
b) Only II and III follow
d) Only I and IV follow
e) None of the above

Directions (Q. 11-20) :In each of the questions below are given three statementsfollowed by three conclusionsnumbered I, II and III. You have to take the given statementsto be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statementsdisregarding commonly known facts.
11.Statements: All windows are doors. All buildings are doors. All doors are boats.

Conclusions :I. All windows are boats.
II. All buildings are boats.
III. Some boats are doors.
a) Only I and II follow
b) Only I and III follow
d) All follow
e) None of these
c) Only II and III follow
12.Statements: Some desks are chairs. Some chairs are pens. Some pens are drawers.

Conclusions :I. Some drawers are desks.
II. Some drawers are chairs.
III. No drawer is chair.
a) None follows
b) Only II follows
c) Only III follows
d) Only either II or III follows
e) Only I and either II or III follow
13.Statements :All flowers are trees. Some trees are houses. All houses are wheels.

Conclusions: I. Some wheels are trees.
II. Some trees are flowers.
III. Some wheels are flowers.
a) Only I and II follow
b) Only I and III follow
c) Only II and III follow
d) All I, II and III follow
e) None of these
14.Statements :Some radios are telephones. All telephones are mirrors. All mirrors are desks.
Conclusions :I. Some radios are desks.
II. Some radios are mirrors.
III. Some desks are telephones.
a) Only I and II follow
b) Only I and III follow
d) All follow
e) None of these
c) Only II and III follow
15.Statements: All furnitures are jungles. No jungle is road. Some roads are hills. Conclusions :I. Some roads are furnitures. II. Some jungles are furnitures.
III. Some hills are jungles.
(a) Only I follows
(b) Only II follows
(c) Only III follows
(d) Only I and II follow
(e) None of the above
16.Statements:All bricks are stones. Some stones are rocks. All rocks are mountains.

Conclusions:I. Somemountains are stones. II. Some mountains are bricks.
III. Some stones are bricks.
a) Only I follows (2) Only III follows (3) Only I and III follow (4) All follow (5) None of these
17.Statements:All arrows are bows. All bows are swords.

Some swords are daggers. All daggers are knives.
Conclusions:I. All knives are bows.
II. Some swords are knives.
III. All bows are arrows.
IV. All arrows are swords.
a) Only II follows
b) Only II and IV follow
d) Only I and III follow
e) None of the above
c) Only III and IV follow
18.Statements: Some pianos are violins. Some violins are drums.

All drums are guitars. No guitar is a flute.
Conclusions:I. Some guitars are pianos.
II. Some drums are flutes.
III. Some pianos are drums.
IV. No flute is a drum.
a) None follows
b) Only I follow
d) Only IV follows
e) None of the above
c) Only either II or IV follows
19.Statements: Some airplanes are helicopters. All helicopters are gliders.

All gliders are kites.
Conclusions:I. Some helicopters are balloons.
III. All balloons are gliders.
a) Only IV follows
b) Only either II or III follow
d) Only I follows
e) None of the above

All kites are balloons.
II. All kites are airplanes.
IV. All helicopters are kites.
c) Only III follows
20.Statements :Some bags are pockets. Some pockets are trousers. All skirts are pockets. Some belts are bags.
Conclusions:I. Some trousers are belts. II. Some skirts are bags.
III. No trouser is belt.
IV. Some skirts are trousers.
a) All follow
b) Only II and IV follow
d) Only either I or III follows
e) None of the above

## Exercise - 10

Directions (1-5) :In each of the following questions two statements are given and these statements are followed by two conclusions numbered (I) and (II). You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

1. Statements:All cars are tables. Some children are tables Conclusions:I. Some cars are children
II. Some children are cars
(a) Only I can be true
(b) Only II can be true
(c) Both I and II can be true
(d) Both I and II cannot be true
2. Statements: All windows are needles. Some trees are windows
Conclusions:I. Some trees are needles
II. Some trees are not needles
(a) Only I can be true
(b) Only II can be true
(c) Both I and II can be true
(d) Both I and II cannot be true
3. Statements:Some nurses are nuns. Madhu is a nun

Conclusions: I. Some nuns are nurses II. Some nurses are not nuns
(a) Only I can be true
(b) Only II can be true
(c) Both I and II can be true
(d) Both I and II cannot be true
4.Statements:Some fools are intelligent. Some intelligent are great Conclusions:I. Some fools are great
II. All great are intelligent
(a) Only I can be true
(b) Only II can be true
(c) Both I and II can be true
(d) Both I and II cannot be true
5. Statements: Some papers are files. Some files are pens

Conclusions:I. Some files are not pens II. Some pens are papers
(a) Only I can be true
(b) Only II can be true
(c) Both I and II can be true
(d) Both I and II cannot be true

Direction (Q.6-8) :In each of the following questions two statements are given. Which are followed by four conclusions (1), (2), (3) and (4). Choose the conclusions which logically follows from the given statements.
6.Statements: No door is dog. All the dogs are cats.

Conclusions:1. No door is cat.
3. Some cats are dogs.
2. No cat is door.
4. All the cats are dogs.
(a) Only (2) and (4)
(b)Only (1) and (3)
(d) Only (3)
(e) All the four
7.Statements: All green are blue. All blue are white. Conclusions:1. Some blue are green. 2.Some white are green
3.Some green are not white
4.All white are blue.
(a) Only (1) and (2)
(b) Only (1) and (3)
(d) Only (2) and (4)
(e) All the four
(c) Only (1) and (4)
8.Statements: All men are vertebrates. Some mammals are vertebrates.

Conclusions:1.All men are mammals 2.All mammals are men.
3. Some vertebrates are mammals.
4. All vertebrates are men.
(a) Only (4)
(b) Only (2)
(d) Only (1) and (3)
(e) All the four
(c) Only (3)

Directions ( 9 to 15) :In each question below are given three Statements followed by three Conclusions numbered I, II and III. You have to take the given Statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given Conclusions logically follows from the given Statements disregarding commonly known facts.
9.Statements: Some cycles are busses. All cars are buses. Some buses are trains.

Conclusions: I. All careare cycles.
II. Some trains are buses.
III. Some trains are cars.
(a) None follows
(b) Only I and II follow
(d) Only II follows
(e) None of these
(c) Only land III follow
10. Statements: All pencils are sticks. Some sticks are notes.All diaries are notes.

Conclusions: I. Some notes are diaries.
II. Some sticks are pencils.
III. Some diaries are sticks.
(a) All follow
(b) Only I follow
(d) Only II follow
(e) None of these
(c)Only I and II follow
11.Statements: Some buds are leaves. No leaf is fruit. Some fruits are buds.

Conclusions:I. Some fruits are leaves.
II. All buds are fruits
III. Some leaves are buds.
(a) Only I or II follows
(b) Only III follows
(c) Only II follows
(d) None follows
(e) None of these
12.Statements: Some birds are animals. All animals are rivers. Some rivers are lions. Conclusions: I. Some lions are animals
II. Some rivers are birds
III. No animal is lion
(a)Only II follows
(b) Only either I or III follows
(c) I or II follows
(d) Only either II or III follow
(e) None of these
13.Statements: All the phones are scales. All the scales are calculators.
Conclusions:1. All the calculators are scales.
2. All the phones are calculators
3. All the scales are phones.
(a) Only (1) and (4)
(b) Only (3) and (4)
(d) Only (1) and (2)
(e) Only (1) and (3)
4. Some calculators are phones.
14.Statements: Some tables are T.V. Some T.V. are radios.

Conclusions:1.Some tables are radios.
3.All the radios are T.V.
(a) Only (2) and (4)
(b) Only (1) and (3)
(d) Only (1) and (4)
(e) None of the four
15. Statements:All lux are vivel. Some lux are dettol. Nodettol are lifeboy.

Conclusion:1.Some vivel are not dettol.

## 3.Somedettol are not vivel.

2. Some radios are tables.
4.All the T.V. are tables.
2.Some lux are not lifeboy.
3. Somedettol are lux.
a) only 1
b) only 2
c) only 1 and 3
d) only 1,2 and 4
e) None of these

Directions 16-20 : In each question, a set of six statements is given, followed by four answer choices. Each of the answer choices has a combination of three statements from the given set of six statements. You are required to identify the answer choices in which the statements are logically related.
16. A. Competitive examinations are tough to pass.
B. There is heavy competition in any field.
C. No student can pass MAT
D. Very few students can pass MAT.
E. MAT is a competitive examination
F. MAT is tough to pass
(a) AEF
(b) ABC
(c) DFB
(d)CDE
17. A. Some lids are nibs
B. All hooks are lids.
C. All hooks are nibs
D. No lid is a nib
E. No lid is a hook
F. No nib is hook
(a) EFD
(b) BCA
(c) DEA
(d) CDA
18. A. All cats are goats
B. All Goats are dogs.
C. No goats are cows
D. No goats are dogs
E. All Cats are dogs
F. All dogs are cows
(a) FAB
(b) ABE
(c) AFB
(d) ABF
19. A. All MBA's are logical
B. Sudhir is rational.
C. Sudhir is a logical MBA
D. Sudhir is a man
E. Some men are MBA's
F. All men are rational.
(a) DEC
(b) EAF
(c) BCF
(d) FDB
20. A. All Pens are knives
B. All knives are spoons
C. No knives are pens
D. No knives are spoons.
E. All pens are spoons.
F. All spoons are pens.
(a) ABE
(b) ABF
(c) AFE
(d) DBE

## Answer Key

Exercise -1

| 1.(b) | 11.(c) |
| :--- | :--- |
| 2.(d) | 12.(c) |
| 3.(a) | 13.(c) |
| 4.(d) | 14.(b) |
| 5.(a) | 15.(b) |
| 6.(d) | 16.(d) |
| 7.(d) | 17.(b) |
| 8.(d) | 18.(c) |
| 9.(d) | 19.(d) |
| 10.(d) | 20.(b) |

Exercise - 2

| 1.(e) | 11.(a) |
| :--- | :--- |
| 2.(a) | 12.(b) |
| 3.(e) | 13.(e) |
| 4.(d) | 14.(e) |
| 5.(b) | 15.(e) |
| 6.(c) | 16.(c) |
| 7.(c) | 17.(c) |
| 8.(c) | 18.(e) |
| 9.(d) | 19.(d) |
| 10.(c) | 20.(e) |

Exercise - 3

| 1.(c) | 11.(d) |
| :--- | :--- |
| 2.(b) | 12.(e) |
| 3.(b) | 13.(e) |
| 4.(a) | 14.(d) |
| 5.(b) | 15.(b) |
| 6.(c) | 16.(d) |
| 7.(b) | 17.(c) |
| 8.(c) | 18.(e) |
| 9.(b) | 19.(c) |
| 10.(e) | 20.(e) |

Exercise-4

| 1.(e) | 11.(d) |
| :--- | :--- |
| 2.(e) | 12.(a) |
| 3.(e) | 13.(d) |
| 4.(a) | 14.(a) |
| 5.(e) | 15.(b) |
| 6.(d) | 16.(a) |
| 7.(e) | 17.(d) |
| 8.(c) | $18 .(\mathrm{a})$ |
| 9.(a) | 19.(b) |
| 10.(b) | $20 .(\mathrm{a})$ |

Exercise - 5

| 1.(d) | 11.(d) |
| :--- | :--- |
| 2.(e) | 12.(d) |
| 3.(e) | 13.(c) |
| 4.(b) | 14.(d) |
| 5.(e) | 15.(b) |
| 6.(d) | 16.(c) |
| 7.(a) | 17.(d) |
| 8.(a) | $18 .(\mathrm{b})$ |
| 9.(d) | 19.(b) |
| 10.(e) | 20.(c) |

Exercise - 6

| 1.(b) | 11.(d) |
| :--- | :--- |
| 2.(d) | 12.(e) |
| 3.(e) | 13.(c) |
| 4.(c) | 14.(a) |
| 5.(b) | 15.(b) |
| 6.(c) | 16.(d) |
| 7.(c) | 17.(b) |
| 8.(d) | 18.(a) |
| 9.(b) | 19.(d) |
| 10(b) | 20.(d) |

Exercise -7

| 1.(c) | 11.(c) |
| :--- | :--- |
| 2.(a) | 12.(d) |
| 3.(b) | 13.(c) |
| 4.(c) | 14.(b) |
| 5.(e) | 15.(d) |
| 6.(c) | 16.(d) |
| 7.(e) | 17.(d) |
| 8.(c) | 18.(a) |
| 9.(a) | 19.(b) |
| 10(a) | 20.(c) |

Exercise - 8

| 1.(d) | 11.(d) |
| :--- | :--- |
| 2.(c) | 12.(d) |
| 3.(d) | 13.(d) |
| 4.(c) | 14.(d) |
| 5.(b) | 15.(c) |
| 6.(c) | 16.(e) |
| 7.(c) | 17.(e) |
| 8.(b) | 18.(e) |
| 9.(c) | 19.(a) |
| 10.(c) | 20.(c) |
| 21.(d) | 22.(e) |

Exercise - 9

| 1.(e) | 11.(d) |
| :--- | :--- |
| 2.(b) | 12.(d) |
| 3.(a) | 13.(a) |
| 4.(c) | 14.(d) |
| 5.(d) | 15.(b) |
| 6.(c) | 16.(c) |
| 7.(a) | $17 .(\mathrm{b})$ |
| 8.(e) | $18 .(\mathrm{d})$ |
| 9.(b) | 19.(a) |
| 10.(d) | $20 .(\mathrm{d})$ |

Exercise - 10

| 1.(c) | 11.(b) |
| :--- | :--- |
| 2.(c) | 12.(b) |
| 3.(c) | 13.(c) |
| 4.(c) | 14.(e) |
| 5.(c) | $15 .(\mathrm{d})$ |
| 6.(d) | $16 .(\mathrm{a})$ |
| 7.(a) | $17 .(\mathrm{b})$ |
| 8.(c) | $18 .(\mathrm{b})$ |
| 9.(d) | 19.(d) |
| 10.(c) | $20 .(\mathrm{a})$ |


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