## Reasoning

1. A 'Traveller' is related to 'Journey' in the same way as a 'Sailor' is related to '.
(A) Ship
(B) Crew
(C) Water
(D) Voyage
(E) Navy
2. Which of the following figures represents the relation between 'Gas', 'Water' and 'Helium' ?
(A)

(B)

(C)


(E)
$\infty$
3. Four of the following five are alike in a certain way and hence form a group. Which one does not belong to the group ?
(A) Block
(B) Hamper
(C) Impede
(D) Avoid
(E) Obstruct
4. Point $P$ is 11 km towards the East of point Q. A man starts from point $Q$ and travels 9 km towards the West. He then takes a left turn and travels 4 km . He finally takes a left turn and travels 20 km before stopping. How far and towards which direction must he travel in order to reach point $P$ ?
(A) 11 km towards South
(B) 4 km towards North
(C) 24 km towards South
(D) 9 km towards North
(E) None of these
5. What will come in place of question-mark (?) in the following series?

|  | AC DG | HL MR ? |
| :--- | :--- | :--- |
| (A) SY | (B) TZ |  |
| (C) RX | (D) SX |  |
| (E) SZ |  |  |

6. 'Sink' is related to 'Float' in the same way as a 'Destroy' is related to '..........'.
(A) Enemy
(B) Demolish
(C) Alive
(D) Peace
(E) Create
7. If each alphabet in the word ABSOLUTE is arranged in alphabetical order (from left to right), and then each vowel is changed to next letter in the English alphabetical series and each consonant is changed to previous letter in English alphabetical series, which of the following will be sixth from the left side of the new arrangement thus formed ?
(A) F
(B) R
(C) V
(D) S
(E) K
8. How many such pairs of letters are there in the word SAMPLER, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series ?
(A) None
(B) One
(C) Two
(D) Three
(E) More than three
9. If each odd digit in the number 813246 is multiplied by three and each even digit is divided by two, what will be the difference between the digits which are third from the left and third from the right of the new number thus formed ?
(A) 1
(B) 2
(C) 3
(D) 7
(E) 8

Directions-(Q. 10-12) Four friends Amrita, Deepa, Smita and Rhea complete their Ph.D. in different number of years. The one who took maximum time took eight years to
complete her Ph.D. while the one who took the least time took only three years to complete it. Rhea took more time only than Amrita and completed her Ph.D. in five years. Smita did not take longer time than Deepa to complete her Ph.D.
10. How many years did Amrita take to complete her Ph.D. ?
(A) 8
(B) 3
(C) 4
(D) Either 6 or 7
(E) Cannot be determined
11. How many years did Smita take to complete her Ph.D. ?
(A) 8
(B) 3
(C) 4
(D) 7
(E) Cannot be determined
12. Who amongst the following took the maximum number of years to complete $\mathrm{Ph}: \mathrm{D}$. ?
(A) Amrita
(B) Rhea
(C) Smita
(D) Deepa
(E) Cannot be determined
13. How many meaningful English words can be formed with the letters TEID using each letter only once in each word ?
(A) None
(B) One
(C) Two
(D) Three
(E) More than three

14; If it is possible to make only one 'meaningful word with the second, fifth, eight and the eleventh letters (when counted from left hand side) of the word 'DEVELOPMENT', which would be the second letter of the word from the left? If more than one such word can be formed, give $X$ as the answer. If no such word can be formed, give Z as your answer.
(A) E
(B) L
(C) T
(D) X
(E) Z
15. In a certain code 'SHORE' is coded as 'QFMPC. In the same code '.........' will be coded as 'WNKGL'.
(A) NIMPY
(B) YPMIN
(C) ULIEJ
(D) ULIJE
(E) JEILU

Directions-(Q. 16-20) Study the following arrangement carefully and answer the questions given below 9492325958585431817476 52126132462
16. How many such 5 s are there in the above arrangement each of which is immediately preceded by an even digit and also immediately followed by an even
digit?
(A) None
(B) One
(C) Two
(D) Three
(E) More than three
17. The positions of how many digits will remain the same if the digits given in Bold in the above arrangement are rearranged in the ascending order from left to right?
(A) None
(B) One
(C) Two
(D) Three
(E) More than three
18. Which of the following is fifth to the left of the twentieth digit from the left end of the above arrangement?
(A) 3
(B) 5
(C) 2
(D) 7
(E) None of these
19. How many such 2 s are there in the above arrangement, each of which is immediately preceded by a perfect square ?
(1 is also a perfect square)
(A) None
(B) One
(C) Two
(D) Three
(E) More than three
20. If all the even digits are deleted from the above arrangement, which of the following will be ninth from the right end of the arrangement?
(A) 9
(B) 5
(C) 1
(D) 3
(E) 7

Directions-(Q. 21-28) Study the following information carefully and answer the given questions -

Eight friends P, Q, R, S, T, V, W and Z , out of whom one is a pilot, professor, businessman, doctor, lawyer,, banker, cricketer or an architect (but not necessarily in the same order), are sitting around a circular table, facing the centre.

- S who is a banker sits third to right of $Z$.
- The professor and the architect are immediate neighbours of each other. Neither the professor nor the architect is an immediate neighbour of either Z or S .
- Cricketer and the pilot are immediate neighbours of each other. Neither Z nor W is a pilot.
- The one who is a professor sits second to the right of T who is a lawyer. V who is a cricketer is not an immediate neighbour of the banker.
- Only R sits between the profejssor and the doctor. P sits third to the right of the pilot.

21. Which of the following pairs represents the immediate neighbours of the doctor?
(A) Professor - businessman
(B) Pilot - professor
(C) Cricketer - businessman
(D) Lawyer - architect
(E) None of these
22. What is the position of the businessman with respect to the pilot?
(A) Third to the left
(B) Second to the left
(C) Immediately to the right
(D) Fourth to the right
(E) Second to the right
23. Who sits third to the right of the professor ?
(A) The banker
(B) Q
(C) The cricketer
(D) The lawyer
(E) None of these
24. Which of the following is true regarding R ?
(A) He is doctor
(B) He is an immediate neighbour of the pilot
(C) R sits between Q and T
(D) He is an immediate neighbour of the professor
(E) None is true
25. How many people sit between the 'banker' and 'W' when counted in anticlockwise direction from the banker ?
(A) None
(B) One
(C) Two
(D) Three
(E) Four
26. Who amongst the following is a pilot?
(A) P
(B) Q
(C) R
(D) Z
(E) None of these
27. What is the profession of $Z$ ?
(A) Businessman
(B) Architect
(C) Professor
(D) Doctor
(E) None of these
28. Who amongst the following sits exactly between T and Q ?
(A) Cricketer
(B) Architect
(C) Professor
(D) Doctor
(E) Banker

Directions-(Q. 29-32) In each question below are three statements followed by two conclusions numbered I and II. You have to take the 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 three statements disregarding commonly known facts. Give answer-
(A) if only conclusion I follows.
(B) if only conclusion II follows.
(C) if either conclusion I or conclusion II follows.
(D) if neither conclusion I nor conclusion II follows.
(E) if both conclusion I and conclusion II follow.
29. Statements:

All shores are beaches.
Some beaches are coasts.
All banks are coasts.
Conclusions:
I. Some banks are beaches.
II. No bank is a shore.
30. Statements:

Some parties are celebrations. All celebrations are occasions.
No occasion is a festival.

Conclusions:
I. No celebration is a festival
II. Some occasions are parties.
31. Statements :

All sports are games.
All Olympics are games.
All plays are Olympics.
Conclusions:
I. Some games are not plays.
II. Some sports are plays.
32. Statements :

Some elections are polls.
All polls are results.
All results are wins.
Conclusions;
I. Some wins are elections.
II. All polls are wins.

Directions-(Q. 33-35) Each of the questions given below is based on the given diagram. You have to take the given diagram to be true even if it seems to be at variance from commonly known facts and then decide which of the five alternatives following each question logically follows from the given diagram.

33. Which of the following represents the graduate population which is not employed in BPO ?
(A) A andB
(B) Only C
(C) BandD
(D) OnlyD
(E) BandE
34. Which of the following represents the population which is graduate, employed in BPO and Earning more than ? 10,000 a month ?
(A) OnlyE
(B) CandD
(C) A, CandD
(D) OnlyB
(E) OnlyC
35. Which of the following represents the population which is not graduate but earns more than ? 10,000 a month ?
(A) OnlyE
(B) OnlyD
(C) OnlyB
(D) BandE
(E) DandE

Directions-(Q. 36-40) Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and Give answers -
(A) 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.
(B) 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.
(C) If the data in Statement I alone or in Statement II alone are sufficient to answer the question.
(D) If the data in both the Statements I and II are not sufficient to answer the question.
(E) If the data in both the Statements I and II together are necessary to answer the question.
36. How many sisters does Priya have?
I. Rohan, Priya's brother has only two siblings.
II. Priya's grandparents have two children and two granddaughters.
37. On which day of the week was Shahid born?
I. Shahid'a mother correctly mentions that he was born before Friday and after Tuesday.
II. Shahid's father correctly remembers that Shahid was not born on a Wednesday.
38. Who is the heaviest amongst P , $\mathrm{Q}, \mathrm{R}, \mathrm{S}$ and T ?
I. R is heavier than Q but not as heavy as T .
II. P is heavier only than S .
39. Is the time in the clock 3 O'clock
. After fifteen minutes, the minute and the hour hands of the clock will make a straight line.
II. The train which is running late by exactly three hours from its scheduled time of arrival i.e., 11 A.M. has reached now.
40. How is 'got' coded in the language ?
I. T got good marks' is written as 'pe li ta so' and 'she has got cold' is written as 'je ra so ki' in the code language.
II. 'what have you got' is written as 'de wa so me' and 'Brazil got four goals' is written as 'di bi fe so' in the code language.
Directions-(Q. 41-45) In each question below is given a statement followed by two assumptions / inferences numbered I and II. An assumption is something supposed or taken for granted and an inference is not directly given but can be inferred based on the facts presented. You have to consider the statement and the following assumptions/inferences and decide which of those is / are implicit in the statement. Give ans-wers-
(A) If only I is implicit.
(B) If only II is implicit.
(C) If either I or II is implicit.
(D) If neither I nor II is implicit.
(E) If both I and II are implicit.
41. Statement: An advertisement in the newspaper - 'Learn a foreign language course to get a high paying job'..
I. All those who learn foreign language get highly paid jobs.
II. Only a foreign language can get someone a high paying job.
42. Statement: The school environment for students should be made "free from fear, trauma and anxiety" to make the Right to Education a grand national movement.
I. The Right to education movement is desirable for the betterment of society.
II. Children feel a lot of anxiety and stress at school.
43. Statement: A leading actor bought a tortoise for $\$ 400$ million in order to save it from the hands of an illegal animal trader.
I. The tortoise would sell for a bigger amount than what the actor bought it for.
II. The tortoise faces danger in the hands of the animal trader.
44. Statement: A leading car manufacturer has re-introduced a new model of the existing car with modified and peppy looks but with the same engine.
I. Engine's performance is not as important as the looks of the car.
II. Looks of the vehicle are important to the buyers.
45. Statement: As the existing sanctuaries failed to protect the lions from poachers, the State government decided to open two new sanctuaries in the same area.
I. There are not enough lions left to protect from the poachers.
II. Keeping lions in captivity rather than in sanctuaries can ensure their safety from the poachers.
Directions-(Q. 46-50) In each of the questions given below which one of the following answer figures on the right should come after the problem figures on the left, if the sequence were continued ?

## Problem Figures

Answer Figures
46.

$\begin{array}{llll}\text { (A) } & \text { (B) } & \text { (C) } & \text { (D) }\end{array}$ (E)
47.

48.

49.

(A) (B) (C) (D) (E)
50.


