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## LOGICAL REASONING

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1. If in a special coded language:  
BOOK is written as 8;  
TABLE is written as 7; &  
BOTTLE is written as 1;  
Then, how would COMPUTER be written in that language?
- (1) 6                      (2) 7                      (3) 2                      (4) 4                      (5) 13
2. Vehicles have been developed that run on diesel, petrol and electricity, which is a remarkable innovative development. During a survey about the percentage wise distribution of cars in four different states, the information regarding ratio between the diesel engine cars, petrol engine cars and electric cars was collected. The total number of cars for which data was collected was 8000. Of these, State 1 had 15% of the total cars in the ratio of 3:4:1 (diesel, petrol and electric); State 2 had 20% of the total cars in the ratio of 5:3:2 (diesel, petrol and electric); State 3 had 30% of the total cars in the ratio of 4:5:3 (diesel, petrol and electric), and; State 4 had 35% of the total cars in the ratio of 7:5:2 (diesel, petrol and electric). Determine: What is the ratio of diesel cars in State 4 to electric cars in State 3?
- (1) 7:3                      (2) 7:4                      (3) 13:7                      (4) 4:7                      (5) 3:7
3. Vehicles have been developed that run on diesel, petrol and electricity, which is a remarkable innovative development. During a survey about the percentage wise distribution of cars in four different states, the information regarding ratio between the diesel engine cars, petrol engine cars and electric cars was collected. The total number of cars for which data was collected was 8000. Of these, State 1 had 15% of the total cars in the ratio of 3:4:1 (diesel, petrol and electric); State 2 had 20% of the total cars in the ratio of 5:3:2 (diesel, petrol and electric); State 3 had 30% of the total cars in the ratio of 4:5:3 (diesel, petrol and electric), and; State 4 had 35% of the total cars in the ratio of 7:5:2 (diesel, petrol and electric). If 45% of the electric cars in State 4 are air conditioned (AC) and remaining are non-AC, what is the total number of non-AC cars?
- (1) 380                      (2) 220                      (3) 200                      (4) 240                      (5) 180
4. A, B, C, D, E, F, G, and H are sitting in a row, not necessarily in the same order. E is immediate neighbor of C. Two persons sit between A and E. C is sitting fourth from one end. There is only one person sitting between H and C. D is sitting second of the left end. Five people are sitting between D and B. G and F are immediate neighbours of each other. Which of the following is a correct arrangement in the give scenario ?
- (1) A, D, H, E, C, G, F                      (2) A, D, C, E, H, F, G                      (3) G, D, A, F, C, E, H  
(4) A, D, G, H, F, C, E                      (5) A, D, C, E, H, F, B
5. There are seven male friends named, A, B, C, D, E, F and G. Each one of them is either a Lawyer, Doctor, Plumber, Teacher, Retired, Electrician or a Hotelier. Each one of them cleans their respective homes on either a Monday, Tuesday, Wednesday, Thursday, Friday, Saturday or Sunday. Each one has a favorite colour amongst Blue, Black, White, Green, Orange, Red or Silver. Also, it is to be noted that no two friends have the same profession, nor do more than one person likes the same colour and nor do any two or more of them clean their homes on the same day. Further, its known that the Retired friend is neither D or A or F and his favorite colour is Orange. The friend who likes Blue is either a Lawyer or cleans his home on a Saturday. The person who likes Saturday is a hotelier and is neither C or D. B is a Doctor but does not clean his home on Monday or Saturday.

The friend who is a teacher cleans home on Friday and likes Green colour.

The Plumber and the Lawyer do not clean their homes on Saturday or Thursday, also the Hotelier cleans his home on a Saturday.

Electrician's favorite colour is Red but his same is neither G nor E. The person who likes Black definitely cleans his home on Thursday. The Teacher and the Electrician clean their homes on two consecutive days.

G likes Silver and the Doctor does not like White. The Plumber likes White colour and his name is not C.

Determine who is the Plumber?

- (1) D (2) A (3) F (4) G (5) C

6. What is the favorite color of the lawyer

- (1) Blue (2) Red (3) White (4) Green (5) Black

7. Who cleans his home on Saturday?

- (1) Hotelier (2) Doctor (3) Lawyer (4) Teacher (5) Electrician

8. Who cleans his home Sunday?

- (1) The person who likes Green (2) The friend whose name A (3) Teacher  
(4) Plumber (5) The person who likes Red

9. Which of the following friend's favorite colour's name does not have the alphabet E in it?

- (1) Electrician (2) A (3) B  
(4) E (5) The person who cleans his home on a Tuesday

10. Which of the following is most definitely true:

- (1) A is a Lawyer and like Green colour (2) B is an Electrician and likes Green colour  
(3) G cleans his home on a Saturday and he is retired (4) C likes White color and is a plumber  
(5) C likes White color and cleans his home on Monday

11. Neena told Deepali that, "your mother-in-law is my father's granddaughter's father's grandfather's daughter-in-law". How is Deepali related to Neena ?

- (1) Sister (2) Mother (3) Mother-in-law  
(4) Daughter-in-law (5) Daughter

12. Arnav rolls an ordinary dice and gets a 3 on the face of the dice. What shall be the number if the number that is on the side that is exactly opposite to the face of the dice is multiplied by itself four times?

- (1) 12 (2) 81 (3) 256 (4) 1296 (5) 625

13. Determine the number of times 3 is present in the given series where it is followed by a prime number but not preceded by a number which is a multiple of 2 ?

3 5 4 8 4 3 7 0 9 8 3 9 4 3 7 7 5 3 1 2 0 7 3 2

- (1) 3 (2) 2 (3) 0 (4) 6 (5) 4

14. Determine the number that shall come in place of ? in the given series:

8 13 10 15 12 ?

- (1) 13 (2) 14 (3) 16 (4) 20 (5) 17

15. Pravesh, Quila, Roshesh, Smitha, Tanaav, Urus, Vihaaz and Wahaab are all sitting on a horizontal desk and with each of them facing the same side.

Further, it is known that:

Pravesh is fourth to the right of Tanaav;

Wahaab is second to the right of Smitha;

Roshesh and Urus are at the two extreme and their immediate neighbors are either Quila and Tanaav;

Wahaab is the immediate to the left of Pravesh and Pravesh is on one of the immediate sides of Quila;

Determine as to who are the immediate neighbors of Wahaab?

- (1) Tanaav and Urus                      (2) Vihaaz and Praves                      (3) Urus and Quila  
(4) Urus and Pravesh                      (5) Vihaaz and Urus

16. If:

A# B means B is the mother of A;

A \$ B means A is the father of B;

A % B means A is the sister of B;

A \* B means A is the son of B;

A @ B means A is the brother of B;

AIB means A is the daughter of B

Then determine that if:

**P\$Q #R% S**

Then, how is R related to P ?

- (1) sister                      (2) son                      (3) niece                      (4) wife                      (5) mother

17. Determine the alphabets that shall come in the blank space :

**UNR ICF LEI OGL RIO**

- (1) WTR                      (2) UKR                      (3) ULS                      (4) UJR                      (5) UKS

18. A stream which flows from west to east in the middle turns left. Further, then it comes across an island and goes around it in an anti-clock manner to take a quarter circle of the island, Then it takes a right from that direction.

Determine that finally in which direction is the stream flowing?

- (1) East                      (2) South                      (3) North-west                      (4) West                      (5) North

19. If 'dog' is called 'lion', 'lion' is called 'bison', 'bison' is called 'snake',

'snake' is called 'mongoose', 'mongoose' is called 'crocodile', then which of the following may be domesticated as a pet ?

- (1) Lion                      (2) Bison                      (3) Snake                      (4) Dog                      (5) Mongoose

20. Five friends are standing in a row and all facing North.

Tony is not adjacent to Bony or Mony. Sony is not adjacent to Bony. Tony is adjacent to Dony. Dony is at the middle in the row.

Then, which pair is at the extreme ends of the row?

- (1) Tony, Dony                      (2) Dony Bony                      (3) Sony, Dony                      (4) Mony, Tony                      (5) Sony, Mony

21. Krishna walked 20 m towards the north. Then he turned right and walked 30 m. Then he turned right and walked 35 m. Then he turned left and walked 15 m. Finally he turns left and went 15 m. In which direction and how many meters is Krishna compared to from the starting position?

- (1) 15 m West                      (2) 30 m East                      (3) 30 m West                      (4) 45 m West                      (5) 45 m East

22. J, K, L, M, N, O, P and R are eight huts. Further, L is 2 km east of K. J is 1 km north of K and Q is 2 km south of J. P is 1 km west of Q while M is 3 km east of P and O is 2 km north of P. R is situated right in the middle of K and L while N is just in the middle of Q and M.

Determine the distance between K and P:

- (1) 1.00 km                      (2) 1.50 km                      (3) 1.41 km                      (4) 1.67 km                      (5) 1.23 km

23. 6: 222::7:?

- (1) 350 (2) 225 (3) 349 (4) 210 (5) 343

24. Identify the odd one out from the options given below:

- (1) 6.40, 9.60, 19.20, 12.80 (2) 1.0, 1.50, 3, 2 (3) 0.5, 0.75, 1.50, 1.0  
(4) 0.40, 0.60, 1.20, 0.80 (5) 0.50, 1.50, 3.0, 0.25

25. In a row of girls, Rimmi and Mimmi occupy ninth place from right end and tenth place from left end respectively. If they interchange their positions then Rimmi and Mimmi will occupy seventeenth place from right end and eighteenth place from left end respectively.

How many girls are there over all in all the given row:

- (1) 18 (2) 27 (3) 26 (4) 25 (5) 35

**Directions for questions 26 to 29:** Answer the following questions based on the information below.

In a special coded language;

the Alphabets G, R, J are represented as 5;

the Alphabets B, V, N are represented as 4; the Alphabets K, C, T are represented as 1; the Alphabets H, S, L are represented as 3;

the Alphabets F, X, P are represented as 7;

the Alphabets Z, D, W are represented as 2;

the Alphabets M, Q, Y are represented as 8;

Further, it is known that any vowel of the English language is coded as 6, if it is not placed at the beginning or end, if any vowel is placed in the beginning or end, it is coded as 9 and if the same vowel is placed both at the beginning and also at the end, then it is coded as \$ at both the places.

Choose the correct code as per the given information in the question that follows:

26. AFDQENI

- (1) \$72894\$ (2) 6728\$46 (3) 9728649 (4) 6728649 (5) 9728679

27. OLSWYCZIT

- (1) 932381261 (2) 933282161 (3) 9332812\$1 (4) 933281261 (5) 933221261

28. TJITAVRQXU

- (1) 1561645789 (2) 15661645879 (3) 1561\$45879 (4) 1561645779 (5) 1561645879

29. XLPVRYTQDC

- (1) 7374851821 (2) 7374582821 (3) 7374581821 (4) 7374561821 (5) 7374511821

30. A clock is set right at 8 AM. This clock gains 10 minutes in 24 hours.

What is the true time when the clock indicates 11 AM ?

- (1) 11:01:58 (2) 10:45:15 (3) 10:59:15 (4) 10:58:45 (5) 10:58:15

31. Determine the probability of getting a 'nine' or 'ten' on a single throw of two dice simultaneously?

- (1) 2/9 (2) 1/5 (3) 7/36 (4) 2/7 (5) 2/13

32. The average age of three men is 50 years and their ages are in the proportion 3 : 5 : 7 respectively. Determine the age of the youngest man in the group ?

- (1) 40 years (2) 25 years (3) 20 years (4) 30 years (5) 35 years

33. Looking at Sweety, Raj says to his friend, "Sweety is the grand-daughter of the elder brother of my father". How is Sweety related to Raj?
- (1) Niece                      (2) Grand daughter                      (3) Daughter                      (4) Sister                      (5) Sister-in-Law
34. Seven experts, N, G, M, W, J, K and L give expert advice sessions to school students. These sessions can take place either before the school, during lunch period or after the school. In scheduling these sessions, the following conditions are followed. At least two experts must hold the sessions before school. At least three experts must hold their sessions after school. M is not available after school and J is available only after school. W always takes extra session during lunch. G will take session before school only if N is also scheduled before school. Then, all the following statements could be true except:
- (1) Twice as many experts take sessions after the school as before the school  
 (2) J will not take sessions during lunch period  
 (3) The same number of experts take sessions before school as during lunch  
 (4) The same number of experts take sessions after school as during lunch  
 (5) The same number of experts sessions before school as after school
35. Six male friends A, B, C, D, E and F are married to R, S, U, V, T and W and not necessarily is same order. Following facts are additionally known about them :-  
 R and S are A's sisters  
 Neither R nor T are wives of C  
 W is wife of E  
 V is wife of B  
 D is not married to R, S or T  
 Who is A's wife?
- (1) S                      (2) V                      (3) T                      (4) R                      (5) U
36. If southeast becomes east and northwest becomes west and all the other directions are changed in the same way, then what will be the direction for north?
- (1) Northwest                      (2) West                      (3) Southwest                      (4) Northeast                      (5) Southeast
37. A, B, C and D are four medical representatives of a company. Each of them must visit exactly two of the eight cities - Delhi, Chennai, Kolkata, Hyderabad, Bangalore, Mumbai, Lucknow and Patna and each city is visited by only one person. C does not visit Mumbai and Delhi, While D does not visit Patna, Kolkata and Hyderabad. B does not visit Lucknow and Patna. Whereas A does not visit Bangalore and Chennai. Patna and Bangalore are visited neither by B nor by C. If Delhi and Lucknow were visited by A, then which one of the following cities could B visit?
- (1) Kolkata                      (2) Hyderabad                      (3) Bangalore                      (4) Mumbai                      (5) Delhi
38. Visheshbar who is a food inspector has to inspect five restaurants A, B, C, D and E. Further, if he inspects B, he cannot inspect C immediately. If he inspects A, he cannot go to E after that. Which of the following can be the correct order of his inspection?
- (1) A-B-C-D-E                      (2) D-C-A-B-E                      (3) D-C-B-E-A                      (4) D-C-B-A-E                      (5) C-D-B-E-A
39. The Six statements below that are labelled as A, B, C, D, E and F are then followed by four combinations of three statements.
- Choose the set in which the statements are logically related i.e the third statement can be deduced from the first two statements together.
- Read the information carefully and answer the question.
- A. All honest persons are good natured.  
 B. Some good natured persons are not honest.  
 C. Some honest persons are good natured.

- D. All honest person are obese.  
 E. All obese person are good natured.  
 F. Some good natured person are honest.

(1) B-E-A                      (2) E-C-F                      (3) C-E-A                      (4) F-B-D                      (5) D-E-A

40. P, Q, R, S and T are the five corners of a table with five sides. Chairs A, B, C, D and E are placed along the sides joining the angular corners. Neither P, Q, R, S, T nor A, B, C, D and E are necessarily in that order. Chair A is along the side joining the corner P and R. S is to the immediate right of P, and R is between P and T. Chair B is along the side of Q and T. Chairs D and E are next to B on either side.

Determine the corners that join the side where the chair C is placed?

(1) P & S                      (2) T & S                      (3) Q & R                      (4) S & Q                      (5) P & Q

41. There are three boxes of three different colors - Green, Blue and Red, and 6 toys of which 2 are of Green colour, 2 are of Blue colour and 2 are of Red colour. The toys are packed in the three boxes such that each box has 2 toys of different colours in it and also the colour of the box is different from the colour of the toys packed in it. Now, 10 chocolates are kept in these boxes in such a way that the Green box has the maximum possible chocolates in it whereas, the Red box has the least possible chocolates in it. Each box should have at least one chocolate and no two boxes have the same number of chocolates.

Determine which of the following is definitely true?

- (1) The box which has the toys of blue and Green colors has 3 chocolates in it  
 (2) The box which has the toys of Green and Red colors has 2 chocolates in it.  
 (3) The Green box, the Blue box and Red Box have 6, 3 and 1 chocolate/s in them respectively  
 (4) Green Box has not more than one chocolate in it  
 (5) The box which has the toy of Red and Blue colors has 8 chocolates in it.

42. A, B, C are three girls who go to buy six items - namely, P, Q, R, S, T and U. Each one of them buys two different items in such a way that if A buys R, then B buys neither P nor S. If B buys Q, then C buys neither U nor T.

Determine that if A buys R and T, then B buys:

(1) P and Q                      (2) R and T                      (3) P and S                      (4) Q and U                      (5) Q and T

43. P, Q, R, S, T and U are six members of a family. R is not the mother of Q but Q is the son of R. P and R are a married couple. T is the brother of R. U is the brother of Q. S is the daughter of P. In this case, T is related to S as being:

(1) S's Uncle                      (2) S's Father                      (3) S's Brother                      (4) S's Nephew                      (5) S's Husband

44. Ambatta's watch works in the following manner during a particular week consisting of Seven Days where each day consists of twenty-four hours:

Day 1: Correctly throughout the whole day

Day 2: Skips One Second during the whole day

Day 3: Skips Three Seconds during the whole day Day 4: Skips Four Seconds during the whole day Day 5: Skips Seven Seconds during the whole day Day 6: Skips Thirteen Seconds during the whole day

Day 7: Skips Seven Seconds during the whole day

How many Seconds did Ambatta's watch work during the given duration as per the information provided?

(1) 604900 Seconds                      (2) 605000 Seconds                      (3) 604765 Seconds  
 (4) 604865 Seconds                      (5) 605030 Seconds

45. Fifteenth August, 1947 was a Friday. Determine the day of the week on the Twenty-Sixth of January, 1957 ?

(1) Saturday                      (2) Friday                      (3) Sunday                      (4) Thursday                      (5) Tuesday

46. Neena purchased two oranges, three bananas and four apples which cost her Rs. 15.  
Had Neena purchased three oranges, two bananas and one apple, it would have cost her only Rs. 10.  
If Neena bought 3 oranges, 3 bananas and 3 apples, determine as to how much did she have to pay ?  
(1) Rs. 10                      (2) Rs. 7 & 50 paise                      (3) Rs. 12                      (4) Rs. 5                      (5) Rs. 15
47. Cost of Type - I Liquid is Rs. 32 per ltr;  
Cost of Type - II Liquid is Rs. 40 per ltr.  
If:  
both types of liquids are mixed in the ratio 3: 5 to create a new type of Liquid (named Type - III), then determine the cost per ltr of the newly created Type - III Liquid, considering the fact that there have been no other costs involved in creation of the new liquid ?  
(1) Rs. 37 per ltr                      (2) Rs. 42 per ltr                      (3) Rs. 36 per ltr                      (4) Rs. 35 per ltr                      (5) Rs. 40 per ltr
48. A cricket umpire has to pick 6 caps and 4 sweaters before a match. She picks up 3 articles at random. Determine the probability that at least one sweater was picked by the umpire?  
(1)  $1/6$                       (2)  $1/12$                       (3)  $2/3$                       (4)  $5/6$                       (5)  $5/11$
49. If one third of one-fourth of a number is 15, then three-tenth of that number will be:  
(1) 46                      (2) 61                      (3) 54                      (4) 63                      (5) 38
50. Male and female students from a particular subject took a class test. The average score of male students was 70 and of female students was 83. The class average however was 76. Determine the ratio of males to females in the class?  
(1) 8 : 7                      (2) 6 : 7                      (3) 7 : 8                      (4) 14 : 17                      (5) 7 : 6
51. Two hands of an ordinary clock lie exactly over one another how many times in a continuous period of 72 hours?  
(1) 24 times                      (2) 72 times                      (3) 76 times                      (4) 66 times                      (5) 56 times
52. If the sum of three consecutive odd numbers is 20 more than the first number. What is the middle number?  
(1) 5                      (2) 13                      (3) 7                      (4) 11                      (5) 9
53. The speeds of 3 cars in the ratio 5:4:6. The ratio between the time taken by them to travel same distance shall be:  
(1) 15: 12 : 11                      (2) 12: 10: 13                      (3) 10 : 20: 30                      (4) 5 : 4 : 6                      (5) 12 : 15 : 10
54. There are four Trees, namely, Lemon Tree, Coconut Tree, Mango Tree and Neem Tree each of which is at a different corner of a rectangular plot. A well is located at one corner and a cabin at another corner. Lemon and Coconut trees are on either side of the gate, which is located at the centre of side, opposite to the side, extremes of which the well and cabin are located. The Mango tree is not at the corner where the cabin is located.  
Determine as to which of the following pairs can be diagonally opposite to each other in the plot ?  
(1) Mango tree and well                      (2) Neem tree and lemon tree                      (3) Neem tree and Mango tree  
(4) Well and Neem tree                      (5) Coconut tree and Lemon tree
55. In the following question below, 3 statements I, II and III are given. You are required to find out which of the given statement(s) is/are sufficient to answer the question.  
Question: How old was Arnav on October 30th 2018?  
Statement I: Arnav is 6 years older than his sister Ananyaa.  
Statement II: Ananyaa is 29 yrs younger than her mother, Deepali.  
Statement III: Deepali celebrated her 77th birthday on June 3rd 2018.  
(1) Statement I & II only                      (2) Statement II & III only                      (3) Statement I, II, & III  
(4) Statement I & III only                      (5) Statement III only

56. Rajesh can check the quality of 1000 items in 5 hours and Rakesh can complete 75% of the same job in 3 hours. How much time is required for both of them to check 1300 items, if Rakesh stops checking after 2 hours ?  
 (1) 4 hours                      (2) 6 hours                      (3) 3 hours                      (4) 2 hours                      (5) 1 hours
57. Akshay and Ajay are friends studying in same class. Ajay could not score as much marks as Akshay scored and hence Ajay's father demanded explanation from Ajay for his poor score. Ajay replied that, "there are so many like me in the class".  
 Based on the information given by Ajay to his father as below, find out the answer to the question that follows:  
 Akshay ranks 13th in the class where 33 students are studying.  
 There are 5 students below Ajay rankwise.  
 Question: How many students are there between Akshay and Ajay?  
 (1) 13                      (2) 14                      (3) 15                      (4) 17                      (5) 16
58. A group of 200 people are chosen randomly at a conference. Later, it was found that 120 of them like blue pens and 140 like green pens while 70 like both green and blue pens. Determine the number of people thus chosen who do not like neither green nor blue pens?  
 (1) 50                      (2) 20                      (3) 30                      (4) 10                      (5) 40
59. Kamje travelled towards East from his office. After travelling 10 Km, he took a right turn and covered 2 km. Then he took a 45 Degree turn in clockwise direction and traveled 3 km. In which direction will he be travelling finally?  
 (1) North-East                      (2) South-East                      (3) South-West                      (4) East                      (5) North-West
60. At 3'0 Clock, if Hour hand of an ordinary clock points towards West, then determine that in which direction will the minute hand point at 7.45 p.m. of the same clock?  
 (1) West                      (2) East                      (3) South                      (4) North                      (5) North-West
61. In a certain code language, '^' means 'is less than', '#' means 'is greater than' and '\*' means 'is equal to' and given that  $a^b$ ,  $c*d$ , and  $c\#b$ , then which of the following is most definitely true?  
 (1)  $a^b\wedge c$                       (2)  $a\#c\#b$                       (3)  $d^a$                       (4)  $a*c$                       (5)  $b\#d$
62. A, B, C, D, E and F are six members of a family. A is mother of B, who is the husband of D. F is the brother of one of the parents of C. D is the daughter in law of E and has no siblings. C is son of D. How is C related to A?  
 (1) Brother in law                      (2) Grandfather                      (3) Son                      (4) Brother                      (5) Grandson

**Directions for questions 63 to 66:** Read the instructions given below carefully and answer the question that follows:

The Hi-Lo game is a four-player game played in six rounds. In every round, each player chooses to bid Hi or Lo. The bids are made simultaneously. If all four bid Hi, then all four lose 1 point each. If three players bid Hi and one bids Lo, then the players bidding Hi gain 1 point each and the player bidding Lo loses 3 points. If two players bid Hi and two bid Lo, then the players bidding Hi gain 2 points each and the players bidding Lo lose 2 points each. If one player bids Hi and three bid Lo, then the player bidding Hi gains 3 points and the players bidding Lo lose 1 point each. If all four bid Lo, then all four gain 1 point each. Four players Arun, Bankim, Charu, and Dipak played the Hi-Lo game. The following facts are known about their game:

- At the end of three rounds, Arun had scored 6 points, Dipak had scored 2 points, Bankim and Charu had scored -2 points each.
- At the end of six rounds, Arun had scored 7 points, Bankim and Dipak had scored -1 point each, and Charu had scored -5 points.
- Dipak's score in the third round was less than his score in the first round but was more than his score in the second round.
- In exactly two out of the six rounds, Arun was the only player who bid Hi



63. What could have been the bids by Arun, Bankim, Charu and Dipak, respectively in the first round?

- (1) Lo Lo Lo Hi      (2) Hi Lo Lo Hi      (3) Hi Hi Hi Lo      (4) Hi Lo Lo Lo      (5) Hi Hi Lo Lo

64. In how many round did Bankim bid Lo?

- (1) 3      (2) 1      (3) 0      (4) 5      (5) 4

65. In how many rounds did all the four players made an identical bid?

- (1) 0      (2) 3      (3) 2      (4) 1      (5) 4

66. In which round was Arun the only player to bid Hi?

- (1) First  
(2) Second  
(3) Fourth  
(4) Third  
(5) Arun was never the only player to bid Hi i any of the rounds

**Directions for questions for 67 to 70:** Answer the following questions based on the information given below:

Five women decided to go shopping at a mall. They arrived at the designated meeting place in the following order: 1. Archana, 2.

Chellamma, 3. Dhenuka, 4. Helen, and 5. Shahnaz. Each woman spent at least Rs. 1000. Below are some additional facts about how much they spent during their shopping spree.

- The woman who spent Rs. 2234 arrived before the lady who spent Rs. 1193.
- One woman spent Rs. 1340 and she was not Dhenuka.
- One woman spent Rs. 1378 more than Chellamma.
- One woman spent Rs. 2517 and she was not Archana.
- Helen spent more than Dhenuka.
- Shahnaz spent the largest amount and Chellamma the smallest.

67. The woman who spent Rs.1193 is which of the following:

- (1) Dhenuka      (2) Chellama      (3) Helen      (4) Archana      (5) Shahnaz

68. What is the difference of amount spent by the woman who spent the second highest amount and the amount spent by Helen ?

- (1) Rs. 1095      (2) 1041      (3) Rs.201      (4) Rs. 283      (5) Rs. 894

69. What is the total sum of amount spent by the women who came first and fourth?

- (1) Rs.3373      (2) Rs.3574      (3) Rs.3857      (4) Rs.3427      (5) Rs.4751

70. The woman who spent Rs. 1193 arrived:

- (1) Fourth      (2) Second      (3) Fifth      (4) First      (5) Third

71. A test has 50 questions. A student scores 1 mark for a correct answer, -

1/3 for a wrong answer, and -1/6 for not attempting a question. If the net score of a student is 32, the number of questions answered wrongly by that student cannot be less than :

- (1) 12      (2) 3      (3) 4      (4) 9      (5) 2

72. Identify the Odd One Out:

- (1) GSFHJ      (2) FGHJS      (3) JSFGH      (4) HJSFG      (5) SFGHJ

(1) x

(2) z

(3) v

(4) w

(5) u

74. A friend is spotted by Lala at a distance of 200 m. When Lala starts to approach him, the friend also starts moving in the same direction as Lala. If the speed of his friend is 15 kmph, and that of Lala is 20 kmph, then how far will the friend have to walk before Lala meets him?

(1) 600 m

(2) 0.6 m

(3) 6 km

(4) 900 m

(5) 6 m

75. If  $A + B$  means A is the sister of B;  $A \times B$  means A is the wife of B,  $A \% B$  means A is the father of B and  $A - B$  means A is the brother of B, then which of the following means T is the daughter of P?

(1)  $P \times Q \% R + S - T$

(2)  $P \times Q \% R + T - S$

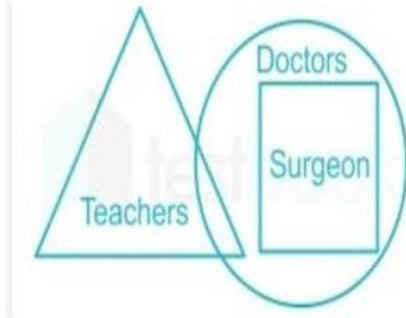
(3)  $P \times Q \% R + T + S$

(4)  $P \times Q \% R - T - S$

(5)  $P \times Q \% R + S + T$

### ABSTRACT REASONING

1. Observe the given figure and read the statements that follow:

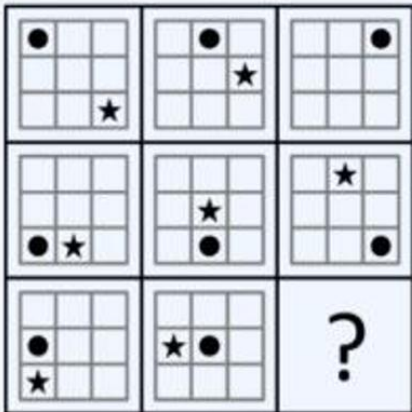


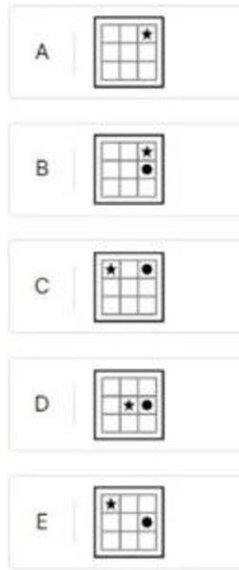
**Statements:**

- A. All teachers are doctors
- B. Some doctors are teachers
- C. All surgeons are doctors

Which of the following is true:

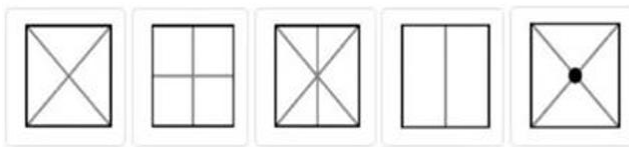
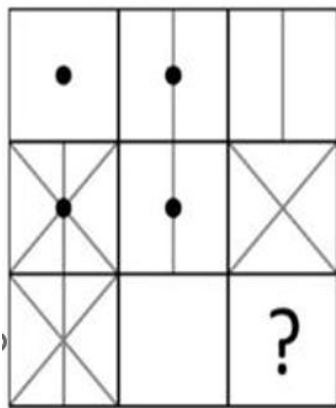
- (1) Only A                      (2) A and B and C                      (3) B and C                      (4) Only C                      (5) A and C
2. Which option shall come in place of '?'





- (1) A      (2) B      (3) C      (4) D      (5) E

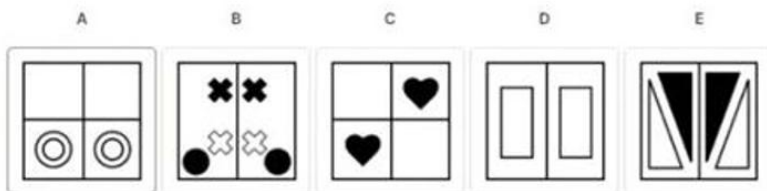
3. Which option from the figure in the lower row shall come in place of '?' :



- A      B      C      D      E

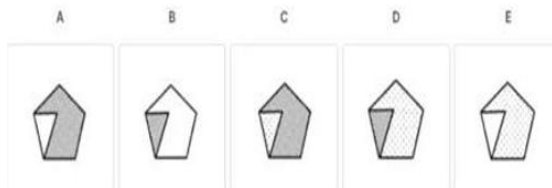
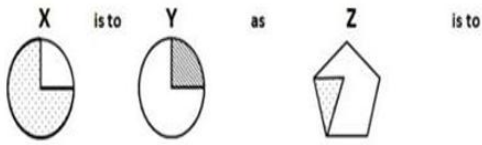
- (1) A      (2) B      (3) C      (4) D      (5) E

4. Identify the Odd One Out:



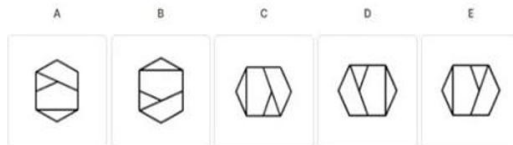
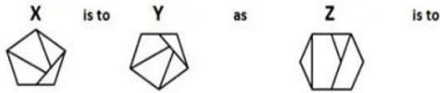
- (1) A      (2) B      (3) C      (4) D      (5) E

5. Which option from the lower row shall complete the sequence of the upper in the manner?



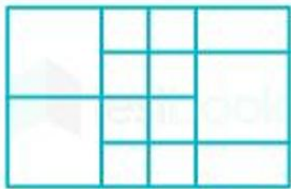
- (1) A (2) B (3) C (4) D (5) E

6. Which option from the lower row shall complete the sequence of the upper in the best manner?



- (1) A (2) B (3) C (4) D (5) E

7. Count the number of squares in the given figure?



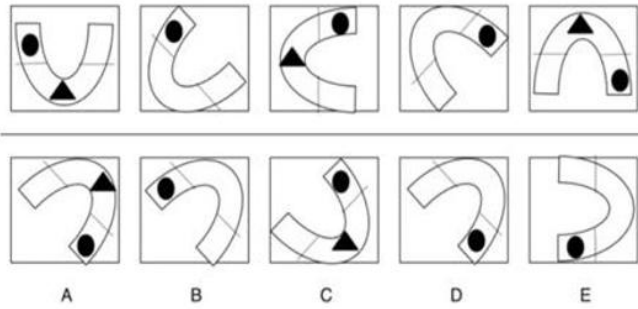
- (1) 16 (2) 18 (3) 13 (4) 20 (5) 12

8. Identify the number of rhombus in the figure given below?



- (1) 13 (2) 14 (3) 15 (4) 16 (5) 17

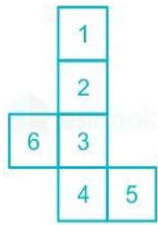
9.



Which option as given in the lower shall come next in sequence in the upper row?

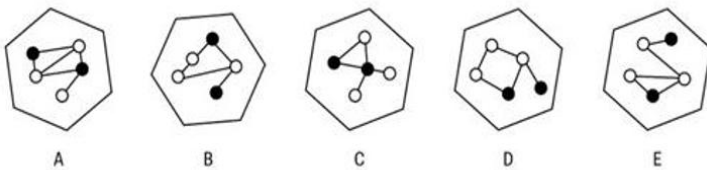
- (1) A (2) B (3) C (4) D (5) E

10. If a cube is to be constructed by folding the given figure along with the lines shown, then in the cube so formed, what would the number be opposite to the number 4?



- (1) 1 (2) 2 (3) 3 (4) 5 (5) 6

11. Identify the Odd One Out:



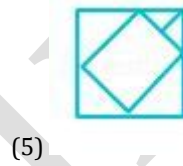
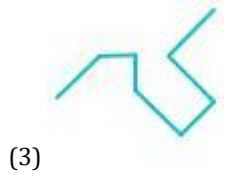
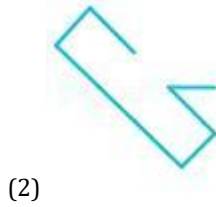
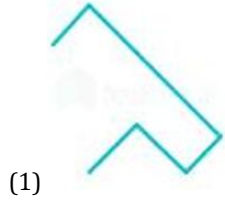
- (1) A (2) B (3) C (4) D (5) E

12. Count the number of triangles given in the figure below:

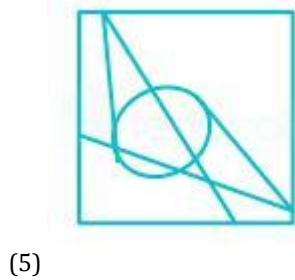
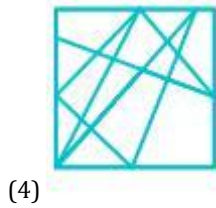
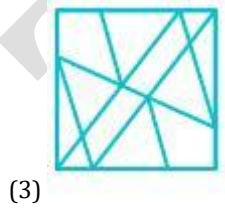
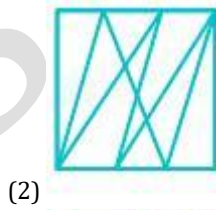
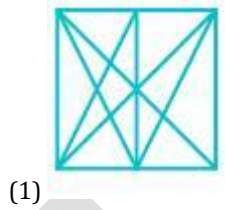


- (1) 32 (2) 16 (3) 22 (4) 24 (5) 13

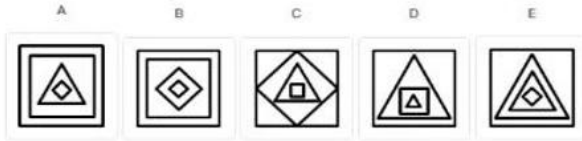
13. Select the option which is not embedded in the figure given:



14. Select the option in which the given figure is embedded in:

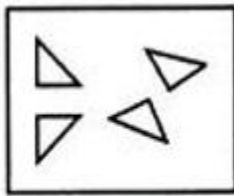


15. Choose the option from the options given in the lower row that shall complete the pattern given in the upper row?



- (1) A (2) B (3) C (4) D (5) E

16. Find out which of the figures (1) (2), (3) and (4) can be formed from the pieces given in figure (X), if none of the figures can be used to form (X), then mark your answer as (5)



(X)



(1)

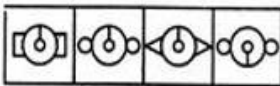
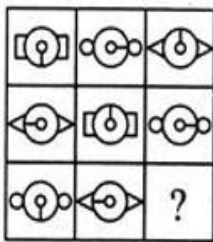
(2)

(3)

(4)

- (1) (1) (2) (2) (3) (3) (4) (4) (5) (5)

17. Select a suitable figure from the four alternatives that would complete the figure matrix by coming in place of "?". If you think that none of the figures can come in the square with "?", then mark your answer as (5).



(1)

(2)

(3)

(4)

- (1) 1 (2) 2 (3) 3 (4) 4 (5) 5

18. The six faces of a dice have been marked with alphabets A, B, C, D, E and F respectively. This dice is rolled down three times. The three positions are shown as:



(i)



(ii)



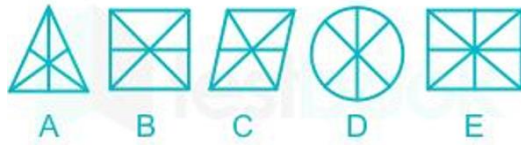
(iii)

Find the alphabet that will lie absolutely opposite A on the dice ?

- (1) B (2) E (3) C (4) D (5) F



19. Identify the Odd One Out:



(1) A

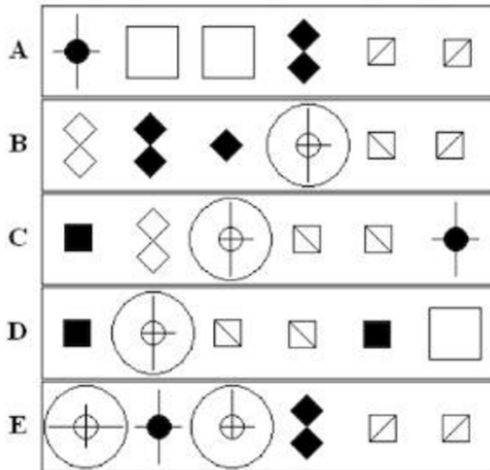
(2) B

(3) C

(4) D

(5) E

20. Identify the Odd One Out:



(1) A

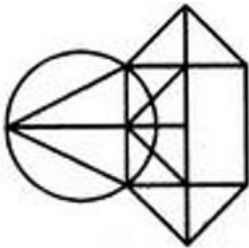
(2) B

(3) C

(4) D

(5) E

21. Find the number of triangles in the given figure?



(1) 12

(2) 13

(3) 15

(4) 14

(5) 11

22. In the given figure, if the centres of all the circles are joined by horizontal and vertical lines, then determine the number of squares that can be thus formed?

(1) 1

(2) 5

(3) 7

(4) 8

(5) 6

23. Which of the options shall be the mirror image of the figure shown here?





(1)



(2)



(3)

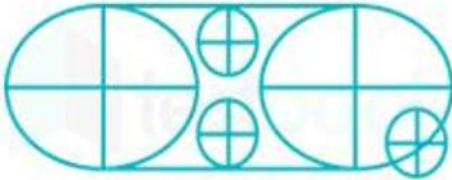


(4)



(5)

24. How many minor sectors are there in the figure given below?



(1) 32

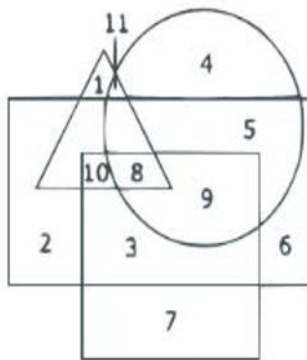
(2) 22

(3) 24

(4) 16

(5) 20

25.



In the figure given above; Triangle represents civil servants, circle represents urban, square represents educated and rectangle represents male.

Which of the following shall represent uneducated urban males:

(1) 310856

(2) 310857

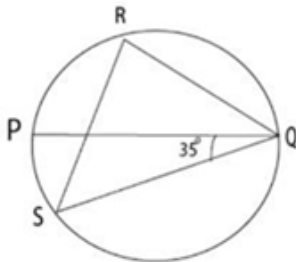
(3) 310858

(4) 310859

(5) 310860

## QUANTITATIVE APTITUDE

1. The cost price of a toy is Rs. 225. The marked price is twice of the cost price. What will be the discount offered to get profit of 56% on the sale of the toy?  
 (1) 30%                      (2) 20%                      (3) 33%                      (4) 22%                      (5) 28%
2. What is the product of all prime numbers between 0 to 100?  
 (1) 0  
 (2) 1  
 (3) 2345421462196427591457908145948012000  
 (4) 23454214621964457908145948016070  
 (5) 2345421462196427591457908145948015000
3. The product of:  
 $17 \times 17 \times 18 \times 18 \times 19 \times 19$   
 shall be fully divisible by which of the following number?  
 (1) 971                      (2) 173                      (3) 646                      (4) 23                      (5) 5813
4. Find the remainder when :  
 $(1719 \times 1721 \times 1723 \times 1725 \times 1727)$  is divided by 18 ?  
 (1) 9                      (2) 1                      (3) 19                      (4) 31                      (5) 7
5. A dealer has 1000 kg sugar and he sells a part of it at 8% profit and the rest of it at 18% profit. The overall profit he earns is 14%. What is the quantity which is sold at 18% profit?  
 (1) 450 kg                      (2) 900 kg                      (3) 630 kg                      (4) 400 kg                      (5) 600 kg
6. The length of a room exceeds its breadth by 2 meters. If the length be increased by 4 meters and the breadth decreased by 2 meters, the area remains the same. Find the surface area of its walls if the height is 3 meters ?  
 (1)  $248\text{m}^2$                       (2)  $48\text{m}^2$                       (3)  $84\text{m}^2$                       (4)  $56\text{m}^2$                       (5)  $260\text{m}^2$
7. A bus covers a distance of first 50 km in 40 minutes, next 50 km at a speed of 2 km per minute and the next 30 km at a speed of 1.0 km per minute. What is its average speed during the entire journey?  
 (1) 81.2 kmph                      (2) 64.8 kmph                      (3) 80.8 kmph                      (4) 84.1 kmph                      (5) 82.1 kmph
8. If the height of a right circular cone is increased by 200% and the radius of the base is reduced by 50%, then volume of the cone shall:  
 (1) increase by 25%    (2) decrease by 25%    (3) increase by 100%  
 (4) increase by 75%    (5) decrease by 20%
9. If the Angle PQS is  $35^\circ$ , determine the Angle QRS:



- (1)  $35^\circ$                       (2)  $135^\circ$                       (3)  $55^\circ$                       (4)  $60^\circ$                       (5)  $65^\circ$

10. Three ordinary coins having only two sides, namely, heads and tails are tossed in the air and two of such tossed coins land with tails facing upwards.

Determine that what are the chances on the next toss of the coins, at least two of the coins will land with the tails facing upwards?

- (1) 80%                      (2) 33.33%                      (3) 66.67%                      (4) 50%                      (5) 25%

**Directions for questions 11 to 13:** Answer the following questions based on the information below.

Study the chart given carefully and answer the question that follows:

The following table lists the marks of seven students (given in rows) of a class across six subjects (given in columns). The Numbers in the brackets indicate the maximum marks of the subject concerned.

	English(150)	Hindi(120)	History(100)	Physics(100)	Maths(100)	Chemistry(100)
Maya	90	50	90	60	70	80
Arya	100	80	88	60	80	70
Riya	90	72	70	72	91	70
Sreya	85	65	80	80	60	60
Roopesh	80	55	85	95	50	90
Chandesh	70	75	65	85	40	61
Hanish	65	35	50	77	80	80

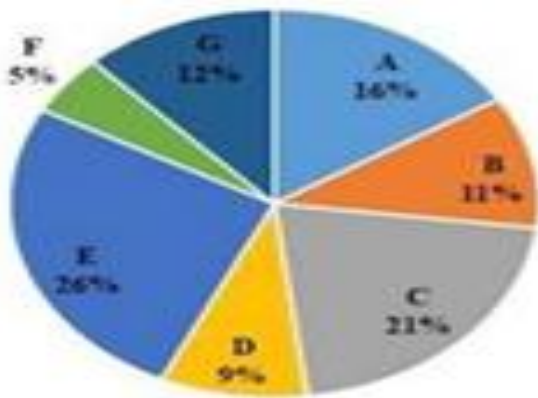
11. Who is the topper of the class?  
 (1) Arya                      (2) Sreya                      (3) Chandesh                      (4) Maya                      (5) Roopesh
12. What will be the remainder if you subtract the marks scored by Roopesh from the marks scored by Riya?  
 (1) 32                      (2) 13                      (3) 23                      (4) 8                      (5) 10
13. If the maximum marks scored by the students in the Hindi subject were to  
 (1) 40                      (2) 80                      (3) 88                      (4) 70                      (5) 68
14. Sunil Makihiya can check the quality of 1000 items in 5 hours and Nilesh Desai can complete 75% of the same job in 3 hours. How much time is required for both of them to check 1300 items, if Nilesh stops checking after 2 hours?  
 (1) 2 hours                      (2) 4 hours                      (3) 3 hours  
 (4) 6 hours 30 minutes                      (5) 4 hours 15 minutes
15. The ratio of weight of three friends, namely, Aashiqui, Aarohi and Aamrohi is 4:9:7. Their total weight is 100 kilograms. How much weight would Aamrohi would have put on if the ratio after her weight gain is 4:7:9 and their collective weight becomes 140 kilograms ?  
 (1) 28 kilograms                      (2) 63 kilograms                      (3) 49 kilograms  
 (4) 21 kilograms                      (5) 35 kilograms
16. In a triangle ABC, AD is the bisector of angle A. If AC = 4.2 cm, DC = 6 cm, BC 10 cm, then find AB?  
 (1) 3.4 cm                      (2) 2.9 cm                      (3) 2.7 cm                      (4) 3 cm                      (5) 2.8
17. There are 6 tasks and 6 persons. Task 1 cannot be assigned either to person 1 or person 2. Task 2 must be assigned to either person 3 or person 4. Every person is to be assigned one task. In how many ways can the assignment be done?  
 (1) 72 ways                      (2) 192 ways                      (3) 360 ways                      (4) 144 ways                      (5) 256 ways

18. The speed of a boat in still water is 5 km/hr. If it takes thrice as much time in going 20 km upstream as in going the same distance downstream, find the speed of the stream:  
 (1) 5.5 km/hr (2) 2.5 km/hr (3) 6.5 km/hr (4) 15.5 km/hr (5) 3.5 km/hr
19. Four sheep farmers, namely Umla, Vimla, Wilma and Xema rented a pasture, as per the following details:  
 Umla grazed her 24 sheep for 3 months;  
 Vimla grazed her 10 sheep for 5 months;  
 Wilma grazed her 35 sheep for 4 months; and  
 Xema grazed her 21 sheep for 3 months.  
 If Umla's share of rent is Rs. 720, find the total rent of the pasture?  
 (1) Rs.2880/- (2) Rs.3200/- (3) Rs.3150/- (4) Rs.3250/- (5) Rs.3350/-
20. A copper wire having length of 243 m and diameter 4 mm was melted to form a sphere. Find the diameter of the sphere thus formed?  
 (1) 16 cm (2) 24 cm (3) 18 cm (4) 22 cm (5) 20 cm

**Directions for questions 21 and 22:** Answer the following questions based on the information below.

The following pie charts lists the details about the percent production by seven different companies, namely, A, B, C, D, E, F and G. The total production for all companies is 500 units.

Percentage(%) of Total Production



Further, it is known that :

- A. Companies A & G are producing more than 500 units;  
 B. Companies B & F are producing less than 250 units;  
 C. Companies C & E account for 705 units;  
 D. Companies D & G are producing less than 200 units;  
 E. Companies E, F & G account for 545 units.

21. Choose the correct answer from the options given below:

- (1) Only A, D, and E are true (2) Only A and E are true (3) Only C and E are true  
 (4) Only B and C are true (5) Only A and D are true

22. In a local election between two candidates, one candidate got 55% of the total valid votes and was declared as winner. 15% of the votes were invalid. If the total number of votes polled were 15200, what were the valid votes of the loser?

- (1) 5832 (2) 5416 (3) 6018 (4) 5800 (5) 5814

**Directions for questions 23 and 24:** Answer the following questions based on the information below.

Study the information given below carefully and answer the question that follows:

The following table shows the percentage distribution of workforce in India and the ratio of male to female workforce in India in various sectors during a particular year. Further, it is known that the total workforce in India during the given year was 6000000.

Sector-wise Distribution of Workforce of India		
Employment Sector	Workforce of India	
	Percentage (%) Distribution	Ratio of Male to Female (M : F)
Service (SE)	15%	3:02
Sales (SA)	12%	5:03
Construction and Maintenance (CM)	9%	5:04
Professional (PR)	18%	5:07
Management (MA)	21%	3:04
Production and Transport (PT)	19%	5:03
Others (OT)	6%	3:05

23. The number of male workforce in SA and MA sectors put together is approximately what percent of the total number of workforce in the PT sector?
- (1) 80%                      (2) 87%                      (3) 85%                      (4) 90%                      (5) 89%
24. The difference in the number of female workforce in SA and MA sectors put together and the number of female workforce in PT sector is approximately close to how much?
- (1) 560000                      (2) 510000                      (3) 570000                      (4) 550000                      (5) 1320000
25. One year payment to the servant is Rs. 90 plus one gift coupon. The servant leaves after 9 months and receives Rs. 65 and a gift coupon. Determine the value of the gift coupon ?
- (1) Rs. 7.50                      (2) Rs. 15                      (3) Rs. 10                      (4) Rs. 12                      (5) Rs. 18
26. How many integer solutions exist for the equation  $11x + 15y = -1$  such that both  $x$  and  $y$  are less than 100 ?
- (1) 1                      (2) 15                      (3) 17                      (4) 16                      (5) 20
27. Let A and B be two solid spheres such that the surface area of B is 300% higher than the surface area of A. The volume of A is found to be  $k\%$  lower than the volume of B. Determine the value of  $k$ :
- (1) 85.5                      (2) 92.5                      (3) 87.5                      (4) 88.5                      (5) 90.5
28. A ship 156 km from the shore develops a leak which admits 2.5 metric tons of water in 6 minutes and 30 seconds. A quantity of 68 metric tons would suffice to sink the ship, but luckily the ship's pumps can throw out 15 metric tons in an hour. The average rate of sailing so that it just reaches the shore from where it left as it begins to sink should be:
- (1) 25 kmph                      (2) 10 kmph                      (3) 18 kmph                      (4) 15 kmph                      (5) 60 kmph
29. How many even integers ' $n$ ', where,  $100 \leq n \leq 200$ , are divisible neither by 7 nor by 9?
- (1) 37                      (2) 38                      (3) 39                      (4) 44                      (5) 40

30. The cost of running a movie theatre is Rs. 10,000 per day, plus additional Rs. 5000 per show. The theatre has 200 seats. A new movie released on Friday. There were three shows, where the ticket price was Rs. 250 each for the first two shows and Rs. 200 for the late-night show.
- For all shows together, total occupancy was 80%. What was the maximum amount of profit possible?
- (1) Rs. 1,20,000      (2) Rs. 1,16,000      (3) Rs. 91,000      (4) Rs. 95,000      (5) Rs. 87,500
31. The least common multiple of a number and 990 is 6930. The greatest common divisor of that number and 550 is 110. What is the sum of the digits of the least possible value of that number?
- (1) 16      (2) 14      (3) 3      (4) 9      (5) 18
32. How many isosceles triangles with integer sides are possible such that sum of two of the side is 12?
- (1) 16      (2) 17      (3) 24      (4) 2      (5) 23
33. A student is standing with a banner at the top of a 100 m high college building. From a point on the ground, the angle of elevation of the top of the student is  $60^\circ$  and from the same point, the angle of elevation of the top of the tower is  $45^\circ$ . Find the height of the student?
- (1) 35.7m      (2) 75.2 m      (3) 50m      (4) 73.2 m      (5) 75 m
34. Pipe A, B and C are kept open and together fill a tank in  $t$  minutes. Pipe A is kept open throughout, pipe B is kept open for the first 10 minutes and then closed. Two minutes after pipe B is closed, pipe C is opened and is kept open till the tank is full. Each pipe fills an equal share of the tank.
- Furthermore, it is known that if pipe A and B are kept open continuously, the tank would be filled completely in  $t$  minutes. How long will it take C alone to fill the tank?
- (1) 20 minutes      (2) 24 minutes      (3) 32 minutes      (4) 48 minutes      (5) 18 minutes
35.  $a, b, c, d$  and  $e$  are 5 distinct numbers that form an arithmetic progression. They are not necessarily consecutive terms but form the first 5 terms of the AP. It is known that  $c$  is the arithmetic mean of  $a$  and  $b$ , and  $d$  is the arithmetic mean of  $b$  and  $c$ .
- Determine which of the following statements is/are true in light of the above stated information?
- Average of all 5 terms put together is  $c$
  - Average of  $d$  and  $e$  is not greater than average of  $a$  and  $b$
  - Average of  $b$  and  $c$  is greater than average of  $a$  and  $d$
- (1) i and ii only      (2) i and iii only      (3) ii and iii only      (4) ii only      (5) i, ii and iii only
36. Vijay buys some eggs. After bringing the eggs home, he finds two to be rotten and throws them away. Of the remaining eggs, he puts five-ninth in his fridge, and brings the rest to his mother, Rashmi's house. She cooks two eggs and puts the rest in her fridge. If her fridge cannot hold more than five eggs, what is the maximum possible number of eggs bought by Vijay?
- (1) 11      (2) 17      (3) 16      (4) 23      (5) 20
37. Some coins are to be put into 7 pockets so that each pocket contains at least one coin. At most 3 of the pockets are to contain the same number of coins, and no two of the remaining pockets are to contain an equal number of coins. What is the least possible number of coins needed for the pockets?
- (1) 17      (2) 7      (3) 28      (4) 13      (5) 22

38. What is the monthly rent for a certain apartment?

1. The monthly rent per person for 4 people to share the rent for the apartment is \$375.
2. The monthly rent per person for 4 people to share the rent of the apartment is \$125 less than the monthly rent per person for 3 people to share the rent.

- (1) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient
- (2) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient
- (3) BOTH Statement TOGETHER are sufficient, but NEITHER statement ALONE is sufficient
- (4) Each statement ALONE is sufficient
- (5) Statement (1) and (2) TOGETHER are NOT sufficient

39. If a certain wheel turns at a constant rate of  $x$  revolutions per minute, how many revolutions will the wheel make in  $k$  seconds?

- (1)  $kx \div 60$                       (2)  $x \div (60k)$                       (3)  $kx$                       (4)  $x \div k$                       (5)  $60kx$

40. Archit invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in 2 years is Rs. 3508, then determine the amount invested in Scheme B by Archit?

- (1) Rs. 6400                      (2) Rs. 6500                      (3) Rs. 7200                      (4) Rs. 7500                      (5) Rs. 6800

41. Choose the correct option that should come next in the series given below  
2, 1,  $(1/2)$ ,  $(1/4)$ , ...

- (1)  $(1/16)$                       (2)  $(2/8)$                       (3)  $(1/3)$                       (4)  $(1/32)$                       (5)  $(1/8)$

42. Two friends, Alka and Alkit appear for an interview for two vacancies for the same post in an Organisation. The probability of Alka's selection is  $1/7$  and Alkit is  $1/5$ . What is the probability that only one of them will be selected?

- (1)  $1/35$                       (2)  $8/15$                       (3)  $4/5$                       (4)  $4/35$                       (5)  $2/7$

43. If:

X stands for addition;

+ stands for subtraction;

- stands for division, then ;

$20 \times 8 \div 4 + 2$  shall be equal to :

- (1) 22                      (2) 15                      (3) 24                      (4) 25                      (5) 30

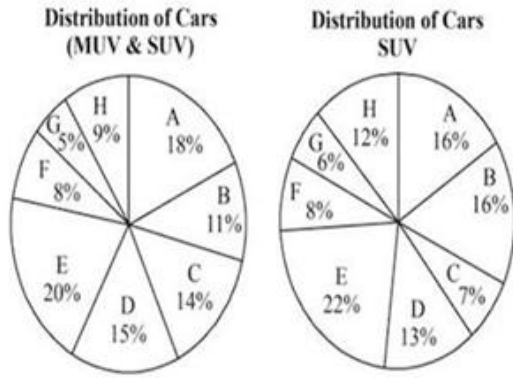
**Directions for questions 45 and 46:** Answer the following questions based on the information below.

Read the information provided and answer the question that follows:

Given below in the first chart is the percentage distribution of total cars (MUV & SUV) distributed by 8 dealers, namely, A, B, C, D, E, F, G, and H across the country. Similarly, the second chart shows the SUV cars distributed by the same dealers in the year 2023.

Further, it is known that the sum total of SUV and MUV cars sold by all the 8 dealers for the year 2023 is 56000 and the total number of SUV cars sold during the same duration is 32000.





44. The total number of cars sold by the dealer D is by what percentage more than the total number of SUV cars sold by dealers C, F and G together?
- (1) 75%                      (2) 50%                      (3) 63%                      (4) 33%                      (5) 25%
45. Determine the ratio between the total number of SUV cars distributed by dealers A and B together and total number of SUV and MUV cars distributed by dealers C and F together?
- (1) 54 : 77                      (2) 64 : 73                      (3) 64 : 77                      (4) 1 : 4.33                      (5) 64 : 79
46. Determine the average number of MUV cars distributed by dealers A, D, E, F and H together?
- (1) 2892                      (2) 3634                      (3) 3326                      (4) 3296                      (5) 3354
47. What number shall you get in the unit digit on solving the following problem :  
 $\{(6374)1793 \times (625)317 \times (341491)\}$
- (1) 0                      (2) 1                      (3) 2                      (4) 3                      (5) 4
48. Gajodhar throws two ordinary dice simultaneously. What is the probability that he shall get two numbers whose product shall be an even number?
- (1)  $\frac{1}{3}$                       (2)  $\frac{2}{3}$                       (3)  $\frac{5}{16}$                       (4)  $\frac{3}{8}$                       (5)  $\frac{3}{4}$
49. What number must be added to  $16a^2 - 12a$  to make it a perfect square?
- (1)  $\frac{9}{4}$                       (2)  $\frac{13}{2}$                       (3)  $\frac{11}{2}$                       (4)  $\frac{16}{9}$                       (5)  $\frac{13}{4}$
50. There are 8436 steel balls, each with a radius of 1 centimeter, stacked in a pile, with 1 ball on top, 3 balls in the second layer, 6 in the third layer, 10 in the fourth, and so on. Determine the number of horizontal layers in the pile ?
- (1) 32                      (2) 36                      (3) 96                      (4) 34                      (5) 24

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**VERBAL ABILITY**


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1. Identify the Odd One Out from the options provided below:

- (1) VABK                      (2) NSTC                      (3) LQRA                      (4) QVWE                      (5) EJKT

**Directions for questions 2 to 5:** Read the passage carefully and answer the question that follows:

Smokejumpers are often asked to address to organizations and the public groups about the importance of fire protection, particularly fire deterrence and detection. Because smoke detectors reduce the risk of dying in a fire by half, smokejumpers often provide audiences with information on how to fix these protective devices in their homes.

Specifically, they tell them these things: A smoke detector should be placed on each floor of a home. While sleeping, people are in particular risk of a surfacing fire, and there must be a detector outside each sleeping area. A good site for a detector would be a hallway that runs between living spaces and bedrooms. Because of the dead-air space that might be missed by turbulent hot air bouncing around above a fire, smoke detectors should be installed either on the ceiling at least four inches from the adjoining wall, or high on a wall at least four, but no further than twelve inches from the ceiling. Detectors should not be mounted near windows, exterior doors, or other places where drafts might direct the smoke away from the unit. Nor should they be placed in kitchens and garages, where cooking and gas fumes are likely to cause bogus alarms.

2. What is the main focus of the author of this passage?

- (1) How smokejumpers carry out their errands  
 (2) The concealment of dead-air space on walls and ceilings  
 (3) Smokejumpers can take care of fires  
 (4) How smoke detectors thwart fires in homes  
 (5) The proper installation of home smoke detectors

3. Which word used in the passage is the synonym of LANCET

- (1) twelve                      (2) window                      (3) inch                      (4) turbulent                      (5) smokejumper

4. The passage indicates that one responsibility of smokejumpers is to:

- (1) Check homes to see if smoke detectors have been properly installed  
 (2) Install smoke detectors in the homes of residents in the community  
 (3) Develop fire safety programs for public leaders and corporate workers  
 (4) Enhance sales of smoke detectors to corporates  
 (5) Address to corporate companies about the importance of preventing fires

5. Which of the following should be avoided as per the contents of the passage:

- (1) Smoke detectors should be placed high on a wall  
 (2) Smoke detectors should be installed in a hallway  
 (3) Bogus alarms  
 (4) Making corporate citizens aware of fire hazards  
 (5) Making fire fighting provisions for dead-air space areas

6. Which word used in the passage is the antonym of NESCIENCE

- (1) Deterrence                      (2) Turbulent                      (3) Bouncing                      (4) Smokejumper                      (5) Detection

7. Choose the correctly spelt word:

- (1) Antedisestablishmentarianism                      (2) Antidisestablishmentarianism  
 (3) Antidistablishmentarianism                      (4) Antidisestablishantarianism  
 (5) Antidisestablishmentarism

8. Choose the correctly spelt word:

- (1) Otrhonolaryngolog      (2) Otorhinilyrangologi      (3) Otorhinolaryonlogis  
(4) Otorhinolaryngolog      (5) Otorhonolaryngolo

9. Choose the correctly spelt word:

- (1) Sesquipedalian      (2) Sesquipadalian      (3) Sesquisepedalian  
(4) Sesquipedilian      (5) Sesquipedaliain

10. Choose the correctly spelt word:

- (1) Pulchritdunous      (2) Pulchirutudinous      (3) Pulchritudinous  
(4) Pulchritudinuuous      (5) Pulchiritudinous

11. Choose the correctly spelt word:

- (1) Carmudgeon      (2) Curmadgeon      (3) Curmudjeon  
(4) Curmudgon      (5) Curmudgeon

12. Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out:

- (1) Neuroscientists have just begun studying exercise's impact within brain cells on the genes themselves.  
(2) Even there, in the roots of our biology, they've found signs of the body's influence on the mind.  
(3) In today's technology-driven, plasma-screened-in world, it's easy to forget that we are born movers-animals, in fact, because we've engineered movement right out of our lives.  
(4) It turns out that moving our muscles produces proteins that travel through the bloodstream and into the brain, where they play pivotal roles in the mechanisms of our highest thought processes.  
(5) It's only in the past few years that neuroscientists have begun to describe these factors and how they work, and each new discovery adds awe- inspiring depth to the picture.

13. Select the grammatically correct sentence:

- (1) Although he had failed in Mathematics, that he received a Degree in Engineering.  
(2) Although, having failed Mathematics, he received the Engineering Degree.  
(3) Although, that he failed in Mathematics, but he received a Degree in Engineering.  
(4) Although he had failed in Mathematics, he received a Degree in Engineering.  
(5) Although he failed in that Mathematics, but he received a Degree in Engineering.

14. The following are jumbled up parts of a sentence. Rearrange them in a proper sequence :

- P: did he realize  
Q: helped by a man  
R: that he had been  
S: he never respected

- (1) PQRS      (2) SRQP      (3) SQRQ      (4) PSRQ      (5) PRQS

15. Choose the option which is opposite in meaning to the word:

**Intrepid**

- (1) Amiable      (2) Fiendish      (3) Cowardly      (4) Tranquil      (5) Teepid

16. The five sentences labelled (1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.

1. Scientists have for the first time managed to edit genes in a human embryo to repair a genetic mutation, fueling hopes that such procedures may one day be available outside laboratory conditions.
2. The cardiac disease causes sudden death in otherwise healthy young athletes and affects about one in 500 people overall.
3. Correcting the mutation in the gene would not only ensure that the child is healthy but also prevents transmission of the mutation to future generations.
4. It is caused by a mutation in a particular gene and a child will suffer from the condition even if it inherits only one copy of the mutated gene.
5. In results announced in Nature this week, scientists fixed a mutation that thickens the heart muscle, a condition called hypertrophic cardiomyopathy.

(1) 12345                      (2) 32514                      (3) 15243                      (4) 51243                      (5) 12435

17. The five sentences (labelled 1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.

1. The implications of retelling of Indian stories, hence, takes on new meaning in a modern India.
2. The stories we tell reflect the world around us.
3. We cannot help but retell the stories that we value after all, they are never quite right for us - in our time.
4. And even if we manage to get them quite right, they are only right for us - other people living around us will have different reasons for telling similar stories.
5. As soon as we capture a story, the world we were trying to capture has changed.

(1) 43215                      (2) 23541                      (3) 25341                      (4) 25314                      (5) 13542

**Directions for questions 18 to 20:** Read the passage given below and answer the question that follows:

Shaw's defense of a theater of ideas brought him up against both his great bugbears-commercialized art on the one hand and Art for Art's Sake on the other. His teaching is that beauty is a by-product of other activity; that the artist writes out of moral passion, not out of love of art; that the pursuit of art for its own sake is a form of self-indulgence as bad as any other sort of sensuality. In the end, the errors of "pure" art and of commercialized art are identical: they both appeal primarily to the senses. True art, on the other hand, is not merely a matter of pleasure. It may be unpleasant. A favorite Shavian metaphor for the function of the arts is that of tooth-pulling. Even if the patient is under laughing gas, the tooth is still pulled.

The history of aesthetics affords more examples of a didactic than of a hedonist view. But Shaw's didacticism takes an unusual turn in its application to the history of arts. If, as Shaw holds, ideas are a most important part of a work of art, and if, as he also holds, ideas go out of date, it follows that even the best works of art go out of date in some important respects and that the generally held view that great works are in all respects eternal is not shared by Shaw. In the preface to *Three Plays for Puritans*, he maintains that renewal in the arts means renewal in philosophy, that the first great artist who comes along after a renewal gives to the new philosophy full and final form, that subsequent artists, though even more gifted, can do nothing but refine upon the master without matching him. Shaw, whose essential modesty is as disarming as his pose of vanity is disconcerting, assigns to himself the role, not of the master, but of the pioneer, the role of a Marlowe rather than of a Shakespeare. "The whirligig of time will soon bring my audiences to my own point of view," he writes, "and then the next Shakespeare that comes along will turn these petty tentatives of mine into masterpieces final for their epoch."

"Final for their epoch"-even Shakespearean masterpieces are not final beyond that. No one, says Shaw, will ever write a better tragedy than *Lear* or a better opera than *Don Giovanni* or a better music drama than *Der Ring des Nibelungen*; but just as essential to a play as this aesthetic merit is moral relevance which, if we take a naturalistic and historical view of morals, it loses, or partly loses, in time. Shaw, who has the courage of his historicism, consistently withstands the view that moral problems do not change, and argues therefore that for us modern literature and music form a Bible surpassing in significance the Hebrew Bible. That is Shaw's anticipatory challenge to the neo-orthodoxy of today.

18. The author sets off the word "pure" with quotation marks in order to:

- (1) Contrast it with the word "true," which appears later
- (2) Strip away its negative connotations
- (3) Suggest that, in this context, it is synonymous with "commercialized"

- (4) Underscore its importance
- (5) Emphasize its positive connotations

19. According to the author, Shaw's didacticism was unusual in that it was characterized by:

- (1) Moralism                      (2) Hedonism                      (3) Dogmatism                      (4) Idealism                      (5) Historicism

20. According to the author, Shaw compares art to tooth-pulling in order to show that:

- (1) All art has a lasting effect on its audience
- (2) Even the best works of art go out of date
- (3) The moral relevance of a work of art must be extracted from the epoch in which it was created
- (4) Pleasure is not the sole purpose of art
- (5) True art is painful to the senses

21. Fill in the blanks with the most appropriate options:

Early        of maladjustment to college culture is        by the tendency to develop friendship networks outside college which mask signals of maladjustment.

- (1) identification, complicated                      (2) treatment, compounded                      (3) prevention, helped
- (4) prevention, compounded                      (5) detection, facilitated

22. Fill in the blanks with the most appropriate options:

Companies that try to improve employees' performance by        rewards encourage negative kinds of behavior instead of        a genuine interest in doing the work well.

- (1) giving, seeking                      (2) withholding, fostering                      (3) conferring, fostering
- (4) connferring, discrediting                      (5) bestowing, discouraging

**Directions for questions 23 to 25:** Read the passage given below and answer the question that follows:

I eschew the notion of racial kinship. I do so in order to be free to claim what the distinguished political theorist Michael Sandel labels "the unencumbered self." The unencumbered self is free and independent, "unencumbered by aims and attachments it does not choose for itself," Sandel writes. "Freed from the sanctions of custom and tradition and inherited status, unbound by moral ties antecedent to choice, the self is installed as sovereign, cast as the author of the only obligations that constrain." Sandel believes that the unencumbered self is an illusion and that the yearning for it is a manifestation of a shallow liberalism that "cannot account for certain moral and political obligations that we commonly recognize, even prize"—"obligations of solidarity, religious duties, and other moral ties that may claim us for reasons unrelated to a choice," which are "indispensable aspects of our moral and political experience."

Sandel's objection to those who, like me, seek the unencumbered self is that they fail to appreciate loyalties that should be accorded moral force partly because they influence our identity, such that living by these attachments "is inseparable from understanding ourselves as the particular persons we are—as members of this family or city or nation or people, as bearers of that history, as citizens of this republic." There is an important virtue in this assertion of the value of black life. It combats something still eminently in need of challenge: the assumption that because of their race black people are stupid, ugly, and low, and that because of their race white people are smart, beautiful, and righteous. But within some of the forms that this assertiveness has taken are important vices—including the belief that because of racial kinship blacks ought to value blacks more highly than others.

I shun racial pride because of my conception of what should properly be the object of pride for an individual: something that he or she has accomplished. I cannot feel pride in some state of affairs that is independent of my contribution to it. The color of my skin, the width of my nose, the texture of my hair, and the various other signs that prompt people to label me black constitute such a state of affairs. I did not achieve my racial designation. It was something I inherited—like my creed and socio-economic starting place and gender—and therefore something I should not be credited with.

In taking this position I follow Frederick Douglass, the great nineteenth

--century reformer, who declared that "the only excuse for pride in individuals is in the fact of their own achievements." I admire Sandel's work and have learned much from it. But a major weakness in it is a conflation of "is" and "ought." Sandel

privileges what exists and has existed so much that his deference to tradition lapses into historical determinism. He faults the model of the unencumbered self because, he says, it cannot account for feelings of solidarity and loyalty that most people have not chosen to impose upon themselves but that they cherish nonetheless. This represents a fault, however, only if we believe that the unchosen attachments Sandel celebrates should be accorded moral weight. I am not prepared to do that simply on the basis that such attachments exist, have long existed, and are passionately felt. Feelings of primordial attachment often represent mere prejudice or superstition, a hangover of the childhood socialization from which many people never recover.

**23.** Through his discussion of the works and beliefs of Michael Sandel, the author suggests all of the following characteristics of the encumbered self

**EXCEPT:**

- (1) that it is influenced by history
- (2) that it maintains many of the interpersonal connections established in Childhood
- (3) that it tries to maintain connections of the past
- (4) that it is the product of independent accomplishment
- (5) that it is manifested in those who embrace racial kinship

**24.** The author states his definition of "what should properly be the object of pride for an individual" in order to :

- (1) ensure that readers do not perceive him as having the yearning that Michael Sandel calls a "manifestation of shallow liberalism"
- (2) gain professional sops
- (3) undermine what Sandel categorizes as "the unencumbered self"
- (4) exhibit his support of Frederick Douglass's opinion at the end of paragraph one
- (5) lay the foundation for his argument against racial solidarity

**25.** With an eye towards the passage as a whole, which of the following represents the author's primary focus ?

- (1) Racial kinship and how its rejection results in accomplishment
- (2) To identify the success stories of socio-political past of the colored community
- (3) Focusing on individual versus group consciousness
- (4) The individual, unencumbered self and the validity of Michael Sandel's position on this type of identity
- (5) Identity formation as self-definition according to family, history, and culture, or as self-definition according to independent accomplishment

**Directions for question 26:** Read the passage carefully and answer the question that follows:

Multitasking has been found to increase the production of the stress hormone cortisol as well as the fight-or-flight hormone adrenaline, which can overstimulate your brain and cause mental fog or scrambled thinking. Multitasking creates a dopamine addiction feedback loop, effectively rewarding the brain for losing focus and for constantly searching for external stimulation. To make matters worse, the prefrontal cortex has a novelty bias, meaning that its attention can be easily hijacked by something new-the proverbial shiny objects we use to entice infants, puppies, and kittens. The irony here for those of us who are trying to focus amid competing activities is clear: The very brain region we need to rely on for staying on task is easily distracted. We answer the phone, look up something on the Internet, check our email, send an SMS, and each of these things tweaks the novelty- seeking, reward-seeking centers of the brain, causing a burst of endogenous opioids (no wonder it feels so good!), all to the detriment of our staying on task. It is the ultimate empty-caloried brain candy. Instead of reaping the big rewards that come from sustained, focused effort, we instead reap empty rewards from completing a thousand little sugarcoated tasks. In the old days, if the phone rang and we were busy, we either didn't answer or we turned the ringer off. When all phones were wired to a wall, there was no expectation of being able to reach us at all times-one might have gone out for a walk or be between places, and so if someone couldn't reach you (or you didn't feel like being reached), that was considered normal. Now more people have cell phones than have toilets. This has created an implicit expectation that you should be able to reach someone when it is convenient for you, regardless of whether it is convenient for them. This expectation is so ingrained that people in meetings routinely answer their cell phones to say, "I'm sorry, I can't talk now, I'm in a meeting." Just a decade or two ago, those same people would have let a landline on their desk go unanswered during a meeting, so different were the expectations for reachability.

26. According to the passage, why do people in meetings routinely answer their cell phones to say, "I'm sorry, I can't talk now, I'm in a meeting."?
- (1) Because, it conveys that the receiver is a busy person.
  - (2) Because, in meetings, cell phones allow people to multitask.
  - (3) Because, it is convenient for people to send a message.
  - (4) Because, if you carry a cell phone, you have to reply.
  - (5) Because, people don't mind if somebody takes a brief phone call.

**Directions for question 27:** Read the passage given below and answer the question that follows:

Schools expect textbooks to be a valuable source of information for students. My research suggests, however, that textbooks that address the place of Native Americans within the history of the United States distort history to suit a particular cultural value system. In some textbooks, for example, settlers are pictured as more humane, complex, skillful, and wise than Native Americans. In essence, textbooks stereotype and depreciate the numerous Native American cultures while reinforcing the attitude that the European conquest of the New World denotes the superiority of European cultures. Although textbooks evaluate Native American architecture, political systems, and homemaking, I contend that they do it from an ethnocentric, European perspective without recognizing that other perspectives are possible.

One argument against my contention asserts that, by nature, textbooks are culturally biased and that I am simply underestimating children's ability to see through these biases. Some researchers even claim that by the time students are in high school, they know they cannot take textbooks literally. Yet substantial evidence exists to the contrary. Two researchers, for example, have conducted studies that suggest that children's attitudes about particular cultures are strongly influenced by the textbooks used in schools. Given this, an ongoing, careful review of how school textbooks depict Native Americans is certainly warranted.

27. Which of the following would most logically be the topic of the paragraph immediately following the passage?

- (1) The centrality of the teacher's role in United States history courses
- (2) Nontraditional methods of teaching United States history
- (3) Ways in which parents influence children's political attitudes
- (4) Specific ways to evaluate the biases of United States history textbooks
- (5) The contributions of European immigrants to the development of the United States

**Directions for question 28:** The sentences as given below, when properly sequenced, form a coherent paragraph. Each sentence is labeled as A, B, C, D and E. Choose the most logical order of sentences from among the given choices to construct a coherent paragraph.

28.

- A. Surrendered, or captured, combatants cannot be incarcerated in razor wire cages; this 'war' has a dubious legality.
- B. How can then one characterize a conflict to be waged against a phenomenon as war?
- C. The phrase 'war against terror', which has passed into the common lexicon, is a huge misnomer.
- D. Besides, war has a juridical meaning in international law, which has codified the laws of war, imbuing them with a humanitarian content.
- E. Terror is a phenomenon, not an entity-either State or non-State

- (1) ECDBA      (2) BECDA      (3) EBCAD      (4) CDEAB      (5) CEBDA

**Directions for question 29:** The sentences as given below, when properly sequenced, form a coherent paragraph. Each sentence is labeled as A, B, C, D and E. Choose the most logical order of sentences from among the given choices to construct a coherent paragraph.

29.

- A. To avoid this, the QWERTY layout put the keys most likely to be hit in rapid succession on opposite sides. This made the keyboard slow, the story goes, but that was the idea.
- B. A different layout, which had been patented by August Dvorak in 1936, was shown to be much faster.
- C. The QWERTY design (patented by Christopher Sholes in 1868 and sold to Remington in 1873) aimed to solve a mechanical problem of early typewriters.

- D. Yet the Dvorak layout has never been widely adopted, even though (with electric typewriters and then PCs) the anti-jamming rationale for QWERTY has been defunct for years.
- E. When certain combinations of keys were struck quickly, the type bars often jammed.

(1) CEABD                      (2) CAEBD                      (3) CBAED                      (4) ECABD                      (5) ABDCE

30. Choose the option that best describes the idiom given below:

To catch a tartar

- (1) To be on a tricky path  
 (2) To deal with someone or something that is difficult to handle  
 (3) To get your reputation sullied  
 (4) To catch a dangerous person  
 (5) To be stuck in a problematic situation

**Directions for question 31:** Read the passage given below carefully and answer the question that follows:

Most diseases or conditions improve by themselves, are self-limiting, or even if fatal, seldom follow a strictly downward spiral. In each case, intervention can appear to be quite efficacious. This becomes all the more patent if you assume the point of view of a knowing practitioner of fraudulent medicine.

To take advantage of the natural ups and downs of any disease (as well as of any placebo effect), it's best to begin your treatment when the patient is getting worse. In this way, anything that happens can more easily be attributed to your wonderful and probably expensive intervention. If the patient improves, you take credit; if he remains stable, your treatment stopped his downward course. On the other hand, if the patient worsens, the dosage or intensity of the treatment was not great enough; if he dies, he delayed too long in coming to you.

In any case, the few instances in which your intervention is successful will likely be remembered (not so few, if the disease in question is self-limiting), while the vast majority of failures will be forgotten and buried. Chance provides more than enough variation to account for the sprinkling of successes that will occur with almost any treatment; indeed, it would be a miracle if there weren't any "miracle cures."

Even in outlandish cases, it's often difficult to refute conclusively some proposed cure or procedure. Consider a diet doctor who directs his patients to consume two whole pizzas, four birch beers, and two pieces of cheesecake for every breakfast, lunch, and dinner, and an entire box of fig bars with a quart of milk for a bedtime snack, claiming that other people have lost six pounds a week on such a regimen. When several patients follow his instructions for three weeks, they find they've gained about seven pounds each. Have the doctor's claims been refuted?

Not necessarily, since he might respond that a whole host of auxiliary understandings weren't met: the pizzas had too much sauce, or the dieters slept sixteen hours a day, or the birch beer wasn't the right brand. Number and probability do, however, provide the basis for statistics, which, together with logic, constitutes the foundation of the scientific method, which will eventually sort matters out if anything can. However, just as the existence of pink does not undermine the distinction between red and white, and dawn doesn't indicate that day and night are really the same, this problematic fringe area doesn't negate the fundamental differences between science and its impostors.

The philosopher Willard Van Orman Quine ventures even further and maintains that experience never forces one to reject any particular belief. He views science as an integrated web of interconnecting hypotheses, procedures, and formalisms, and argues that any impact of the world on the web can be distributed in many different ways. If we're willing to make drastic enough changes in the rest of the web of our beliefs, the argument goes, we can hold to our belief in the efficacy of the above diet, or indeed in the validity of any pseudoscience.

31. The claim that "it would be a miracle if there weren't any 'miracle cures'" would be most weakened by evidence that showed that:

- (1) the possibility of improvement is nonexistent during the course of many illnesses  
 (2) some patients recover from illness without any sort of intervention at all  
 (3) most illnesses cure themselves  
 (4) some crackpot treatments have turned out to have authentic medical benefit  
 (5) the number of fraudulent medical practitioners has dwindled considerably



32. Suppose that in order to demonstrate the legitimacy of his work, a faith healer compiles a book of interviews of people who swear that he has cured them just by blessing them. The author would most likely respond by asserting that:
- (1) the interviewees have been deluded into thinking that they have improved when they have not
  - (2) the ability to cure people does not justify shameless self-promotion
  - (3) healers have the power to heal life threatening illnesses
  - (4) the interviewees would have gotten better without the healer's intervention
  - (5) eyewitness testimony of emotional events tends to be unreliable
33. Doctors and scientists continue to debate whether certain types of alternative medicine are scientific or pseudo-scientific. How is this information relevant to the passage?
- (1) It strengthens the claim that there is a fundamental difference between medicine and science
  - (2) pseudo-science alone has healed many an illnesses
  - (3) It weakens the claim that the scientific method is useful in sorting science from pseudo-science
  - (4) It weakens the claim that one can hold on to whatever pet theory one fancies
  - (5) It strengthens the claim that science and pseudoscience cannot always be distinguished
34. The author of the passage would most likely inclined to agree with the individual who argues that Willard Van Orman Quine's philosophical views are:
- (1) bankrupt, because they do not apply to any particular situation
  - (2) callous as they do not serve any purpose
  - (3) extreme, because some beliefs can be proven to be either true or false
  - (4) flawed, because they do not explain why anyone would reject any belief
  - (5) insightful, because any set of beliefs has to be as valid as any other
35. Select the option that is most nearly the opposite in meaning to the word given below:
- Fiendish**
- (1) Bashful
  - (2) Callous
  - (3) Complacent
  - (4) Sympathetic
  - (5) Incomplete
36. Choose the option which best expresses the meaning of the given word:
- ELEGIAC**
- (1) Peaceful
  - (2) Mournful
  - (3) Confused
  - (4) Cheerful
  - (5) Restless
37. Select the option that is most nearly the opposite in meaning to the word given below:
- Acme**
- (1) Condition of oily human skin
  - (2) Pimple
  - (3) Volcano
  - (4) Palatial
  - (5) Lowest
38. Choose the option which best expresses the meaning of the given word:
- Emancipate**
- (1) Rigorous
  - (2) Healthy
  - (3) Royal
  - (4) Enslave
  - (5) Long Rope
39. Select the option that is most nearly the opposite in meaning to the word given below:
- Sanguine**
- (1) Bellicose
  - (2) Red Skinned
  - (3) Pessimistic
  - (4) Gladiatorial
  - (5) Technical
40. Select the option that is most nearly the opposite in meaning to the word given below:
- Wrench**
- (1) Seal
  - (2) Yank
  - (3) Abstract
  - (4) Tug
  - (5) Rip

41. Choose the option that best describes the idiom given below:

**Thick as two short planks**

- |                     |                                 |                     |
|---------------------|---------------------------------|---------------------|
| (1) In deep trouble | (2) Having lack of intelligence | (3) Preservationist |
| (4) Braveheart      | (5) Being in bad company        |                     |

42. Choose the option that best describes the idiom given below:

**On the breadline**

- (1) Dieting to reduce weight
- (2) Being in the risky position
- (3) Suffering from boredom
- (4) Planning food consumption to increase body weight
- (5) Being in condition of poverty

43. Choose the option that best describes the meaning of the sentence given below:

**Use of mild words in place of words required by truth**

- |               |               |                |                 |               |
|---------------|---------------|----------------|-----------------|---------------|
| (1) Euphemism | (2) Cinephile | (3) Misobiblic | (4) Pessimistic | (5) Rapacious |
|---------------|---------------|----------------|-----------------|---------------|

44. Choose the option which best expresses the meaning of the word given below:

**VITUPERATE**

- |           |          |           |                |          |
|-----------|----------|-----------|----------------|----------|
| (1) Teach | (2) Warm | (3) Abuse | (4) Appreciate | (5) Hail |
|-----------|----------|-----------|----------------|----------|

45. Choose the option which best expresses the meaning of the word given below:

**CONTRITE**

- |              |             |            |                 |               |
|--------------|-------------|------------|-----------------|---------------|
| (1) Penitent | (2) Bashful | (3) Joyful | (4) Remorseless | (5) Conniving |
|--------------|-------------|------------|-----------------|---------------|

**Directions for question 46 to:** Read the passage given below and answer the question that follows:

Seeking a competitive advantage, some professional service firms have considered offering unconditional guarantees of satisfaction. Such guarantees specify what clients can expect and what the firm will do if it fails to fulfill these expectations. Particularly with first-time clients, an unconditional guarantee can be an effective marketing tool if the client is very cautious, the firm's fees are high, the negative consequences of bad service are grave, or business is difficult to obtain through referrals and word-of-mouth.

However, an unconditional guarantee can sometimes hinder marketing efforts. With its implication that failure is possible, the guarantee may, paradoxically, cause clients to doubt the service firm's ability to deliver the promised level of service. It may conflict with a firm's desire to appear sophisticated, or may even suggest that a firm is begging for business. In legal and health care services, it may mislead clients by suggesting that lawsuits or medical procedures will have guaranteed outcomes. Indeed, professional service firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees. And any firm that implements an unconditional guarantee without undertaking a commensurate commitment to quality of service is merely employing a potentially costly marketing gimmick.

46. The passage's description of the issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?

- (1) Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlements alone
- (2) Predicting the monetary cost of legal or health care services is more
- (3) The legal and medical professions have standards of practice that would be violated by attempts to fulfill such unconditional guarantees
- (4) The dignity of the legal and medical professions is undermined by any attempts at marketing of professional services, including unconditional guarantees

- (5) The result of a lawsuit of medical procedure cannot necessarily be determined in advance by the professionals handling a client's case

**Directions for questions 47 to 49:** Read the passage given below carefully and answer the question that follows:

Mode of transportation affects the travel experience and thus can produce new types of travel writing and perhaps even new "identities." Modes of transportation determine the types and duration of social encounters; affect the organization and passage of space and time;... and also affect perception and knowledge-how and what the traveler comes to know and write about. The completion of the first U.S. transcontinental highway during the 1920s... for example, inaugurated a new genre of travel literature about the United States- the automotive or road narrative. Such narratives highlight the experiences of mostly male protagonists "discovering themselves" on their journeys, emphasizing the independence of road travel and the value of rural folk traditions.

Travel writing's relationship to empire building-as a type of "colonialist discourse"-has drawn the most attention from academicians. Close connections have been observed between European (and American) political, economic, and administrative goals for the colonies and their manifestations in the cultural practice of writing travel books. Travel writers' descriptions of foreign places have been analysed as attempts to validate, promote, or challenge the ideologies and practices of colonial or imperial domination and expansion. Mary Louise Pratt's study of the genres and conventions of 18th- and 19th-century exploration narratives about South America and Africa (e.g., the "monarch of all I survey" trope) offered ways of thinking about travel writing as embedded within relations of power between metropole and periphery, as did Edward Said's theories of representation and cultural imperialism. Particularly Said's book, *Orientalism*, helped scholars understand ways in which representations of people in travel texts were intimately bound up with notions of self, in this case, that the Occident defined itself through essentialist, ethnocentric, and racist representations of the Orient. Said's work became a model for demonstrating cultural forms of imperialism in travel texts, showing how the political, economic, or administrative fact of dominance relies on legitimating discourses such as those articulated through travel writing.

Feminist geographers' studies of travel writing challenge the masculinist history of geography by questioning who and what are relevant subjects of geographic study and, indeed, what counts as geographic knowledge itself. Such questions are worked through ideological constructs that posit men as explorers and women as travelers-or, conversely, men as travelers and women as tied to the home. Studies of Victorian women who were professional travel writers, tourists, wives of colonial administrators, and other (mostly) elite women who wrote narratives about their experiences abroad during the 19th century have been particularly revealing. From a "liberal" feminist perspective, travel presented one means toward female liberation for middle- and upper-class Victorian women. Many studies from the 1970s onward demonstrated the ways in which women's gendered identities were negotiated differently "at home" than they were "away," thereby showing women's self-development through travel. The more recent poststructural turn in studies of Victorian travel writing has focused attention on women's diverse and fragmented identities as they narrated their travel experiences, emphasizing women's sense of themselves as women in new locations, but only as they worked through their ties to nation, class, whiteness, and colonial and imperial power structures.

47. According to the passage, which of the following options could most appropriately be attributed to the American travel literature of the 1920's?

- (1) It developed the male protagonists' desire for independence
- (2) That women could not be bracketed as good solo travellers
- (3) It presented travellers' discovery of their identity as different from others
- (4) It celebrated the freedom that travel gives
- (5) It showed participation in local traditions

48. Homichlophobia is the fear of:

- (1) Homo Sapiens      (2) Being alone      (3) Height      (4) Fox      (5) Fog

49. A person suffering from Aichmophobia is most likely to be afraid of which of the following object?

- (1) Computers      (2) Text Books      (3) Back Aches      (4) Kinves      (5) Tooth Aches

**Directions for question 50:** Read the passage given below carefully and answer the question that follows:

Vocabulary used in speech or writing organizes itself in seven parts of speech (eight, if you count interjections such as Oh! and Gosh! and Fuhgeddaboudit!). Communication composed of these parts of speech must be organized by rules of grammar upon which we agree. When these rules break down, confusion and misunderstanding result. Bad grammar produces bad sentences. My favorite example from Strunk and White is this one: "As a mother of five, with another one on the way, my ironing board is always up."

Nouns and verbs are the two indispensable parts of writing. Without one of each, no group of words can be a sentence, since a sentence is, by definition, a group of words containing a subject (noun) and a predicate (verb); these strings of words begin with a capital letter, end with a period, and combine to make a complete thought which starts in the writer's head and then leaps to the reader's.

Must you write complete sentences each time, every time? Perish the thought. If your work consists only of fragments and floating clauses, the Grammar Police aren't going to come and take you away. Even William Strunk, that Mussolini of rhetoric, recognized the delicious pliability of language. "It is an old observation," he writes, "that the best writers sometimes disregard the rules of rhetoric." Yet he goes on to add this thought, which I urge you to consider: "Unless he is certain of doing well, [the writer] will probably do best to follow the rules."

The telling clause here is Unless he is certain of doing well. If you don't have a rudimentary grasp of how the parts of speech translate into coherent sentences, how can you be certain that you are doing well? How will you know if you're doing ill, for that matter? The answer, of course, is that you can't, you won't. One who does grasp the rudiments of grammar finds a comforting simplicity at its heart, where there need be only nouns, the words that name, and verbs, the words that act.

Take any noun, put it with any verb, and you have a sentence. It never fails. Rocks explode. Jane transmits. Mountains float. These are all perfect sentences. Many such thoughts make little rational sense, but even the stranger ones (Plums deify!) have a kind of poetic weight that's nice. The simplicity of noun-verb construction is useful-at the very least it can provide a safety net for your writing. Strunk and White caution against too many simple sentences in a row, but simple sentences provide a path you can follow when you fear getting lost in the tangles of rhetoric-all those restrictive and nonrestrictive clauses, those modifying phrases, those appositives and compound-complex sentences. If you start to freak out at the sight of such unmapped territory (unmapped by you, at least), just remind yourself that rocks explode, Jane transmits, mountains float, and plums deify. Grammar is. ..the pole you grab to get your thoughts up on their feet and walking.

**50.** All of the following statements can be inferred from the passage EXCEPT that:

- (1) sentences do not always have to be complete
- (2) the subject-predicate relation is the same as the noun-verb relation
- (3) "Grammar Police" is a metaphor for critics who focus on linguistic rules
- (4) the primary purpose of grammar is to ensure that sentences remain simple
- (5) best words do not play any role in grammar