

VA-AII
DILR-AII
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INSTRUCTIONS

1. Read the instructions given at the beginning/end of each section or at the beginning of a group of questions very carefully.
2. This test has total of 100 questions in three sections: (i) Quantitative Ability – 34 Questions (ii) Data Interpretation and Logical Reasoning – 32 Questions and (iii) Verbal and Reading Comprehension – 34 Questions. The total time available for the test is **180 minutes**. However, you will be allotted exactly 60 minutes for answering the questions in each section and you cannot switch from one section to another while answering the questions in a section.
3. All questions carry three marks each. Each wrong answer to any multiple choice type question will attract a penalty of one mark. Wrong answers to any non multiple choice type question will not attract any penalty.

SECTION - I

Number of Questions = 34

DIRECTIONS for questions 1 to 3: Select the correct alternative from the given choices.

1. The 342nd term of the series 1, 2, 2, 3, 3, 3, 4, 4, 4, 5, 5, 5, 5, is
(A) 24. (B) 25. (C) 26. (D) 27.
2. $\lceil a \rceil$ is defined as the least integer greater than or equal to a . Let $P(a, b) = \lceil a \rceil + \lceil b \rceil + \lceil (a + b) \rceil$. Let $Q(a, b) = \lceil 2a \rceil + \lceil 2b \rceil$. Which of the following never holds true?
(A) $P(a, b) \neq Q(a, b)$ (B) $P(a, b) = Q(a, b)$
(C) $P(a, b) < Q(a, b)$ (D) $P(a, b) > Q(a, b)$
3. A number when divided by 17 leaves a remainder of 7. Which of the following could be the remainder when the number is divided by 85?
(A) 25 (B) 43 (C) 58 (D) 72

DIRECTIONS for question 4: Type in your answer in the input box provided below the question.

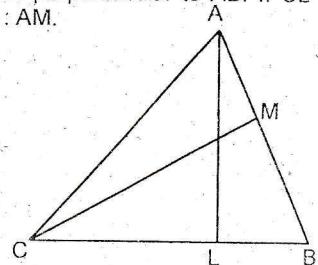
4. Raghu writes the number 458 on the blackboard, after which each one of his friends walks up to the board and is allowed to perform exactly one operation. The operation can be either to double the number on the board (after the erasing the earlier number) or to erase the last digit of the number on the board. If after sometime the number 14 was on the board, then what is the minimum possible number of friends that Raghu has? Assume that no friend walks up to the board twice.

DIRECTIONS for questions 5 to 7: Select the correct alternative from the given choices.

5. A factory produces nuts and bolts. A machine in it produces only nuts while another produces only bolts. The machine producing only nuts produces 400 nuts per minute and needs to be cleaned for 15 minutes after production of 2000 nuts. The machine

producing only bolts produces 300 bolts per minute and needs to be cleaned for 15 minutes after production of 3000 bolts. Find the minimum time (in minutes) required to produce 12000 pairs of bolts and nuts if both machines are operated simultaneously.
(A) 85 (B) 105 (C) 100 (D) 120

6. In the figure below, AL is perpendicular to BC and CM is perpendicular to AB. If CL = AL = 2BL, find MC : AM.



- (A) 2 (B) 3 (C) 4 (D) Cannot be determined
7. If for the quadratic equation $px^2 + qx + r = 0$, the sum of the squares of its roots is equal to the sum of the cubes of its roots and $q^3 + pq^2 = 2p + 3q \neq 0$, then what is the value of pr ?
(A) 0 (B) 1 (C) 2 (D) Cannot be determined

DIRECTIONS for questions 8 and 9: Type in your answer in the input box provided below the question.

8. A tap can fill an empty drum in 60 minutes. 20 minutes after the tap is opened, a hole is made at the bottom of the drum to drain the water away. The drum is filled after a further period of 120 minutes. In how many minutes can the hole alone empty the entire drum of water?

- ✓ 8. In how many ways can a committee of five persons be formed from six men and five women, such that the committee has more men than women?

DIRECTIONS for question 10: Select the correct alternative from the given choices.

- ✓ 10. The sum of ten consecutive integers is half the sum of the next five consecutive integers. What is the sum of all the 15 integers?
 (A) 120 (B) 180 (C) 60 (D) 75

DIRECTIONS for question 11: Type in your answer in the input box provided below the question.

- ✓ 11. Mr. Santaram has five children – 3 daughters and 2 sons. Five years ago, the combined age of his daughters was thrice that of his sons and five years hence, the combined age of his daughters will be twice that of his sons. If the present age of Mr. Santaram's youngest child is at least six years, what is the present average age (in years) of his five children?

DIRECTIONS for questions 12 and 13: Select the correct alternative from the given choices.

- ✓ 12. x is an integer such that $16 \leq x \leq 81$. If $-y = \frac{x^2 + 3\sqrt{x}(2x+9) + 162}{x+9\sqrt{x}+18}$, then what is the range of y ?
 (A) $-63 \leq y \leq -13$ (B) $39 \leq y \leq 52$
 (C) $13 \leq y \leq 63$ (D) $28 \leq y \leq 75$

- ✓ 13. In a class, one-fourth of the students passed in Maths. If one-sixth of the students, including one-third of those who passed in Maths, passed in Chemistry, then what percent of the students passed in neither of the two subjects?

$$(A) 66\frac{2}{3}\% \quad (B) 33\frac{1}{3}\% \quad (C) 60\% \quad (D) 55\%$$

DIRECTIONS for questions 14 and 15: Answer the questions on the basis of the information given below.

Bhavanipur and Durgapur are two small villages which are separated by a distance of 72 km. At 6:00 a.m., Aja starts from Bhavanipur and Indu starts from Durgapur, with speeds of 32 km/hr and 16 km/hr respectively and travel towards each other. Every time Aja covers a distance of 8 km, he reduces his speed to half his existing speed. Similarly, each time Indu covers 8 km, she reduces her speed to half her existing speed.

14. At what time do they meet?
 (A) 1:30 p.m. (B) 1:35 p.m.
 (C) 1:40 p.m. (D) 1:45 p.m.
15. Until the time they meet, what is the sum of durations in which both of them travel at the same speed?
 (A) 1 hour (B) $3\frac{1}{2}$ hours
 (C) $5\frac{1}{2}$ hours (D) $6\frac{1}{2}$ hours

DIRECTIONS for question 16: Select the correct alternative from the given choices.

16. Consider two cubes of equal volume. In one of the cubes, the biggest possible sphere is inscribed. The other cube is cut into exactly 64 identical small cubes. In each of them, the biggest possible sphere is placed. The volume of the sphere in the first cube is denoted by V_1 . The total volume of the spheres in the small cubes is denoted by V_2 . Find $V_1 : V_2$.
 (A) 4 : 3 (B) 1 : 1
 (C) 3 : 4 (D) None of these

DIRECTIONS for question 17: Type in your answer in the input box provided below the question.

- ✓ 17. In a container containing a solution of milk and water, the ratio of milk and water is 3 : 2. Now, 10 litres of water is added to this solution and the ratio becomes 2 : 3. Find the final quantity (in litres) of the solution in the container.

 litres

DIRECTIONS for questions 18 and 19: Select the correct alternative from the given choices.

18. On a certain day, Ajay works at $11\frac{7}{11}$ th of his usual rate of doing work and completes a work 28 minutes earlier than the usual time required. Had Ajay worked at $7\frac{7}{11}$ th of his usual rate of doing work, then the time taken by him to complete the work would have been how much more than the usual time required?
 (A) 44 minutes (B) 32 minutes
 (C) 28 minutes (D) 16 minutes

19. A total of 15 teams participated in a tournament. Each team plays with every other team exactly once. A team gets 3 points for a win, 2 points for a draw and 1 point for a loss. The team which scored the least got 21 points. The scores of all the teams were distinct and at least one match played by the winning team was drawn. Which of the following is always true for the winning team?
 (A) It had at least two draws.
 (B) It had a maximum of 4 losses.
 (C) It had a maximum of 9 wins.
 (D) It had at most 3 losses.

DIRECTIONS for question 20: Type in your answer in the input box provided below the question.

20. For all non-negative integers x and y , if
 $f(x, y) = f(x-1, f(x, y-1));$
 $f(0, y) = y+1;$
 $f(x+1, 0) = f(x, 1),$

find the value of $f(1, 2)$.

DIRECTIONS for question 21: Select the correct alternative from the given choices.

21. AB is the diameter of a circle with centre O and C is a point on the circle different from A and B. D is a point on BC such that $OD \perp BC$. E is a point on BD

such that OE bisects $\angle BOD$ and $BE : ED = 2 : 1$. If F is the midpoint of DC , find the length (in cm) of AF , given that $AB = 24$ cm.

- (A) $\sqrt{161}$ (B) $\sqrt{171}$ (C) $\sqrt{181}$ (D) $\sqrt{191}$

DIRECTIONS for question 22: Type in your answer in the input box provided below the question.

22. The p^{th} term and $(p+2)^{\text{th}}$ term of an arithmetic progression are in the ratio $p : (p+2)$. The sum of the first $2p$ terms of the arithmetic progression and the sum of the first $3p$ terms of the arithmetic progression are in the ratio $14 : 31$. Find the value of p .

DIRECTIONS for questions 23 to 30: Select the correct alternative from the given choices.

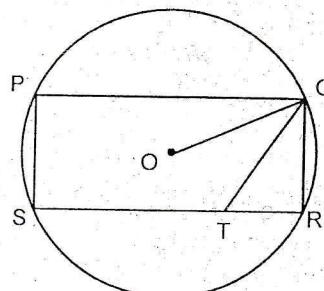
23. $Y = \{y_1, y_2, y_3, \dots, y_n\}$ and $y_1 y_2 y_3 y_4 y_5 + y_2 y_3 y_4 y_5 y_6 + \dots + y_{n-4} y_{n-3} y_{n-2} y_{n-1} y_n + y_{n-3} y_{n-2} y_{n-1} y_n y_1 + y_{n-2} y_{n-1} y_n y_1 y_2 + y_{n-1} y_n y_1 y_2 y_3 + y_n y_1 y_2 y_3 y_4 = 0$. Which of the following is true, given that each of the elements of Y is either 2 or -2 and $n \geq 6$?
- (A) n is an odd multiple of 5
 (B) $3n$ is odd
 (C) $5n$ is even
 (D) n has only two factors

24. Let $a = (\log_2 x)^2 - 12 \log_2 x + 48$, where x is a real number. The number of distinct roots of $x^a = 16^{16}$ is
- (A) 0 (B) 1 (C) 2 (D) 3

25. $\frac{1}{3} + \frac{1}{15} + \frac{1}{35} + \dots + \frac{1}{483} =$
- (A) $\frac{21}{44}$ (B) $\frac{23}{44}$
 (C) $\frac{27}{44}$ (D) None of these

26. In the figure below (not drawn to scale), $PQRS$ is a rectangle inscribed in the circle with centre O . Length of QR is less than the length of PQ . The area of $PQRS$ and the area of the circle are in the

ratio $\frac{\sqrt{7}}{2\pi}$, while T is a point on SR such that $\angle RQT = \angle OQP$. Find $RT : RQ$.



- (A) $1 : \sqrt{6}$ (B) $1 : \sqrt{5}$ (C) $1 : \sqrt{8}$ (D) $1 : \sqrt{7}$

27. How many integral values of x satisfy the inequality $\frac{(2x+2^2)(4x+4^2)\dots(10x+10^2)}{(12^2-12x)(14^2-14x)\dots(20^2-20x)} < 0$?

- (A) 4 (B) 5
 (C) 9 (D) None of these

28. The product of 114 and 21 in a certain number system is 2444. Find the decimal system value of the number represented as 4231 in that number system.

- (A) 566 (B) 1398 (C) 944 (D) 676

29. A test has 100 questions. Candidates score 2 marks for each correct answer, lose 1 mark for each wrong answer and lose half a mark for leaving a question unattempted. A student scores a total of 160 marks. On analyzing his performance, he concludes that he could not have got more than 8 questions wrong. How many questions did he leave unattempted, if the student got at least one answer wrong?

- (A) 8 (B) 4
 (C) 10 (D) None of these

30. In a class of 51 students, the difference between the highest mark and the least mark is 70. If the average score is calculated without considering the student who got the highest mark, then the average score decreases by 1%. If the average score is calculated without considering the student who got the least mark, then the average score increases by $\frac{1}{3}\%$. What is the original average score of the class?

- (A) 60 (B) 70 (C) 80 (D) 40

DIRECTIONS for question 31: Type in your answer in the input box provided below the question.

31. Naina purchased two dairymilks, three perks and five eclairs and paid ₹40. Had Naina purchased three dairymilks, five perks and nine eclairs, she would have paid ₹64. Googly demanded only one dairymilk, one perk and one eclair. If Naina purchased only what was demanded by Googly, then how much (in ₹) would she have paid?

DIRECTIONS for questions 32 to 34: Select the correct alternative from the given choices.

32. A positive number N is divided into two unequal parts such that the difference of the cubes of the two parts is 133 times their difference. If the product of the two parts is 36, then what is the value of N ?

- (A) 12 (B) 13 (C) 15 (D) 20

33. If k and m are natural numbers, then the remainder when $(3k + (-1)^m)^6$ is divided by 9
- (A) is always 8.
 (B) is always 1.
 (C) is either 1 or 8.
 (D) depends upon the value of m .

34. Find the value of $\log_{\sqrt[4]{2}} 16\sqrt{2} + \log_{\sqrt[3]{2}} 32\sqrt{32}$

- (A) 40.5 (B) 20.5
 (C) 3.625 (D) 55.5

SECTION - II
Number of Questions = 32

DIRECTIONS for questions 35 to 39: Answer the questions on the basis of the information given below.

The following table provides certain details of 60 students belonging to a school. The details are: gender, number of students and marks obtained by them in mathematics. The first number in each cell is the number of students in that group. The minimum and maximum marks of the students in each group are given in brackets. (For example, there are four girls in class 10 and among them minimum marks scored by any girl is 35 and the maximum marks scored by any girl is 99.)

easy

Class	Boys	Girls	Total
7	2(25 – 40)	10(15 – 35)	12
8	2(28 – 60)	16(20 – 55)	18
9	16(30 – 83)	6(25 – 70)	22
10	4(45 – 98)	4(35 – 99)	8
	24	36	60

DIRECTIONS for question 35: Select the correct alternative from the given choices.

35. The percentage of students who got less than 31 marks is at least
 (A) 10%. (B) 12.5%.
 (C) 13.33%. (D) 8.33%.

DIRECTIONS for question 36: Type in your answer in the input box provided in the question.

36. From the above given information, the percentage of students who got more than 60 marks can be at most %.

Enter your answer as a decimal value, rounded off to two decimal places.

DIRECTIONS for question 37: Select the correct alternative from the given choices.

37. The percentage of students who got marks between 25 and 55 (both inclusive) is atleast
 (A) 10%. (B) 7.5%. (C) 8.33%. (D) 15%.

DIRECTIONS for question 38: Type in your answer in the input box provided in the question.

38. The average mark per student in the classes 7, 8, 9 and 10 together is at least .

Enter your answer as a decimal value, rounded off to three decimal places.

DIRECTIONS for question 39: Select the correct alternative from the given choices.

39. What is the maximum number of students across the four classes who could have received the same marks?
 (A) 44 (B) 37 (C) 56 (D) 48

DIRECTIONS for questions 40 to 44: Answer the questions on the basis of the information given below.

Mr. Raj Kapur, an anthropologist, who is doing a project on racial features, observed that in his class of 130 students, 60 students had black eyes, 50 students had an aquiline nose, 45 students had a broad forehead and 90 students had exactly one of the three features.

DIRECTIONS for question 40: Type in your answer in the input box provided below the question.

40. What is the maximum possible number of students who had at least two of the three features?

DIRECTIONS for questions 41 to 44: Select the correct alternative from the given choices.

41. What is the maximum possible number of students who had none of the three features?
 (A) 40 (B) 32 (C) 18 (D) 8

42. What is the maximum possible number of students who had an aquiline nose but had neither black eyes nor a broad forehead?
 (A) 29 (B) 39 (C) 42 (D) 49

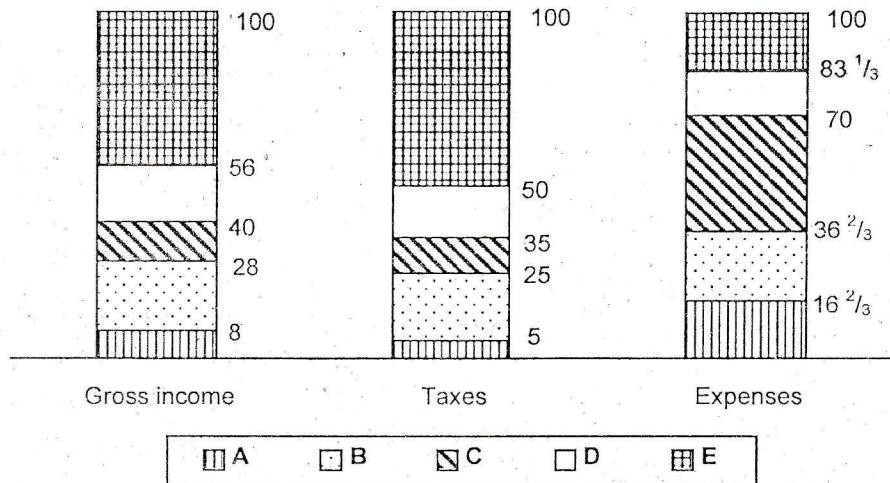
43. Of the students with a broad forehead, the number of students with an aquiline nose is 5 more than those with black eyes. What is the difference between those with only black eyes and those with only aquiline nose?
 (A) 5 (B) 15 (C) 25 (D) 30

44. If five students had all the three features, what is the maximum possible number of students who had black eyes and an aquiline nose?
 (A) 25 (B) 30 (C) 45 (D) 50

DIRECTIONS for questions 45 to 50: Answer the questions on the basis of the information given below.

In the following graph, the first stacked bar gives the gross income of each of five friends – A, B, C, D and E – as a percentage of the total gross income of all the five friends put together. The other two stacked bars in the graph give a similar break up of the total taxes paid by the five friends and the total expenses incurred by them. For example, of the total expenses incurred by all the five friends put together, $83\frac{1}{3}\% - 70\% = 13\frac{1}{3}\%$ are the expenses incurred by D.

(All values in percentages)



The tax on any gross income upto ₹P is 10% of the gross income and for any gross income in excess of ₹P, the tax charged will be 10% of ₹P plus 20% of the gross income in excess of ₹P.

Net Income = Gross Income – Taxes

$$\text{Savings} = \text{Net Income} - \text{Expenses}$$

For none of the five friends are the expenses incurred more than the net income.

DIRECTIONS for question 45: Select the correct alternative from the given choices.

DIRECTIONS for question 46: Type in your answer in the input box provided in the question.

46. B's expenses, as a percentage of his net income, are at most %.

Enter your answer as a decimal value, rounded off to two decimal places.

DIRECTIONS for question 47: Select the correct alternative from the given choices.

47. The person who pays the highest percentage of his gross income as taxes is
(A) E. (B) B. (C) C. (D) D.

DIRECTIONS for question 48: Type in your answer in the input box provided in the question.

48. A's savings, as a percentage of his gross income, are at least %.

DIRECTIONS for questions 49 and 50: Select the correct alternative from the given choices.

49. Among the five friends, expenses, as a percentage of net income, are the second highest for
(A) A. (B) B. (C) C. (D) D. (E) E.

50. Among the five friends, the savings are the maximum for
(A) C.
(B) D.
(C) E.
(D) Cannot be determined

DIRECTIONS for questions 51 and 55: Answer the questions on the basis of the information given below.

Today, Sampath bought six different varieties of vegetables at the market, each at a different price. The quantity of no two varieties of vegetables bought by him is the same. Further, the quantity, in kg, of each vegetable that he bought is a natural number. He bought 5 kg of potatoes and 3 kg of tomatoes. The price of carrots is more than that of onions but less than that of brinjals. He bought a total of 21 kg of vegetables, of which 6 kg were of the costliest variety. Potatoes are cheaper than carrots, while radishes are cheaper than onions, of which he bought 2 kg. Potatoes are costlier than at least two varieties of vegetables. Radishes are not the cheapest variety of vegetables that he bought.

DIRECTIONS for questions 51 to 55: Select the correct alternative from the given choices.

51. How many kilograms of the cheapest variety of vegetables did Sampath buy?
 (A) 1 (B) 3 (C) 4 (D) 5

52. If Sampath bought 5 kg of the third cheapest variety of vegetables, then what is the third costliest variety of vegetables?
 (A) Onions
 (B) Carrots
 (C) Potatoes
 (D) Cannot be determined

53. Which of the following statements is definitely false?
 (A) Sampath spent more money on onions than on tomatoes.
 (B) Sampath spent less money on carrots than on radishes.

- (C) Sampath spent more money on radishes than on potatoes.
 (D) Sampath spent less money on carrots than on tomatoes.

54. The maximum amount of money that Sampath spent was on
 (A) Potatoes.
 (B) Brinjals.
 (C) Tomatoes.
 (D) Cannot be determined

55. If Sampath spent the same amount of money in purchasing tomatoes and radishes, how many kilograms of the second costliest vegetable did he buy?
 (A) 1 kg
 (B) 3 kg
 (C) 4 kg
 (D) Cannot be determined

DIRECTIONS for questions 56 to 60: Answer the questions on the basis of the information given below.

Person	Personality Index	Wealth Index	Happiness Index	Social Index
A	4	7	1	2
B	5	6	3	12
C	1	4	2	3
D	2	10	5	1
E	8	11	7	9
F	9	8	6	11
G	7	5	9	10
H	6	12	11	8
I	12	1	10	6
J	11	2	4	5
K	10	9	12	7
L	3	3	8	4

The table above, shows the ranks of 12 persons – from A through L – in four different indices as indicated.

A consolidated rank, ranging from 1 to 12, was obtained for each of the persons. This was done such that, among any two persons, a person would have a numerically lower (i.e., a better) consolidated rank than the other, if his rank is numerically lower than that of the other in at least three of the four indices. At this stage, among any two persons, if one has a numerically lower rank than the other in exactly two of the indices, then the two persons are said to be tied. In case of a tie between two persons, the sum of the numerical values of their ranks (in the four indices) is compared to the other person. If even at this stage, the sums so obtained are equal, then the person with a numerically lower Happiness Index is finally ranked numerically lower, when compared to the other person.

DIRECTIONS for questions 56 to 58: Select the correct alternative from the given choices.

56. The consolidated rank of which person was 1?
 (A) A (B) C (C) D (D) I

57. G had a consolidated rank of
 (A) 8. (B) 9. (C) 4. (D) 10.

58. H has a consolidated rank which is numerically higher than that of
 (A) 11 persons.
 (B) 10 persons.
 (C) 1 person.
 (D) 2 persons.

DIRECTIONS for question 59: Select one or more answer choices according to the directions given in the question.

59. Which of the following persons have a numerically lower rank than E across each of the four indices and also have a numerically lower consolidated rank than E?

Select all such persons:

- (A) A
 (B) B
 (C) D
 (D) G
 (E) L
 (F) J

60. Among the persons who were ranked first in any of the four indices, who has the numerically highest consolidated rank?
(A) A (B) C (C) D (D) I

DIRECTIONS for questions 61 to 65: Answer the questions on the basis of the information given below.

A locality has three houses, each painted in a different colour among Red, Blue and Green. Each house is occupied by exactly one person among Anand, Boman and Chintu. When asked about who lives in which house, each of them made exactly two statements as follows:

Anand –

- Statement I : *I live in the Red house.*
Statement II : *Boman lives in the Green house.*

Boman –

- Statement I : *Chintu doesn't live in the Red house.*
Statement II : *I don't live in the Blue house.*

Chintu –

- Statement I : *I live in the Green house.*
Statement II : *Anand doesn't live in the Red house.*

Further it is known that exactly three of the above six statements are true.

DIRECTIONS for questions 61 to 63: Select the correct alternative from the given choices.

61. If it is known that both the statements made by one of the persons are true, then who lives in the Red house?
(A) Anand (B) Boman
(C) Chintu (D) Data inconsistent

62. For which person is it possible that both the statements made by that person are false?
(A) Anand
(B) Boman
(C) Chintu
(D) More than one of the three

63. If Anand lives in the Blue house, then for which person is it possible that both the statements made by that person are true?

- (A) Anand (B) Boman
(C) Chintu (D) None of these

DIRECTIONS for question 64: Select one or more answer choices according to the directions given in the question.

64. If each person spoke at least one true statement, who among the following could live in the Blue house?

Select all that apply:

- (A) Anand
 (B) Boman
 (C) Chintu
 (D) Data Inconsistent

DIRECTIONS for question 65: Select the correct alternative from the given choices.

65. If it is known that Anand always lies, who lives in the Green house?
(A) Anand
(B) Boman
(C) Chintu
(D) Cannot be determined

DIRECTIONS for question 66: Select the correct alternative from the given choices.

66. Four people – Amar, Chintu, Farhan and Hari – participated in a race and each person finished in a different position. Further, the weight of each person is different. The following information is also known:
(i) The person who was the heaviest was not the last to finish the race, while the person who weighed the least was the second to finish the race.
(ii) Chintu finished the race before Farhan but after Amar.
(iii) Hari was the heaviest among the four, and Chintu's weight was more than Farhan's.

Who among the following stood second in the race?

- (A) Amar
(B) Chintu
(C) Hari
(D) Cannot be determined

SECTION – III

Number of Questions = 34

DIRECTIONS for questions 67 to 82: Read the passages given below and answer the questions associated with each of them.

PASSAGE – I

It is said that for a corporation, the 'unhappy customers are its greatest source of learning' and these words are frequently used in business meetings and training workshops for employees engaged in customer relationship management (CRM) activities. These famous words were spoken by Bill Gates, at that time, when the world was rediscovering the art of listening to the customers by implementing better CRM practices.

A company could discover important insights from their customers (whether happy or unhappy) and use these insights to improve processes and products so that they can make it better for their future customers. So when Whirlpool launched their washing machines way back in India, they listened to their 'unhappy customers' and realized that the typical Indian dress such as a saree or a dhoti were too big to be washed properly in their machines. Hence, they did

some product redesign and launched a series of washing machines catering to the Indian customer's needs – and this translated to increased sales and market share for the company.

Some companies even went out and made drastic changes in their product offerings – changes that were fundamentally opposite to their corporate strategy – after they listened to their 'unhappy customers'. Some of the examples are KFC (Kentucky Fried Chicken) offering a 'vegetable thali' to their customers in Delhi and Maxwell House Coffee repositioning their product as a 'fruit drink' to attract Jewish customers during the fasting season of 'Passover' in Israel. Companies like Starbucks learned from their 'happy customers' that integrating the shop design to suit the local culture was the key to success and they started implementing this strategy with great success in their global expansion.

Hence, there always was something to be learnt from the customers and this has been the fundamental motivation for all CRM aficionados. However, in the last couple of years, since the advent of a new kind of communication medium, drastically changed the way in which they can share their experiences about products and services – and the way in which companies can respond (if at all) to such information.

This new medium called 'social media' has proved to be a game-changer in the way people communicate with other people. So, when an American Airlines customer was not happy with the way the cabin crew behaved with him, he simply went ahead and posted his experience on a social networking site which went viral i.e. got read and shared by millions of other people, and within days, the Airways had to compensate him for 'shutting up'. Incidentally, American Airlines is designated as 'most hated' on social media according to a research done by Amplicate in October, 2011.

In such a communication environment, where any negative experience can be shared with so many people instantaneously, the new reality for a corporation is that the 'unhappy customers are its greatest source of pain'.

67. According to the passage, how has social media changed the role that unhappy customers play in a company's strategy?

- (A) Unhappy customers are now more forthright in providing feedback to the companies through the new communication channel called social media.
- (B) Social media has made it easier for customers to voice negative sentiments against any company.
- (C) Unhappy customers can easily publicize their negative feedback against any company and can rapidly damage the reputation of the company.
- (D) Unhappy customers use social media to publicize their criticisms more than happy customers do to publicize their commendations.

cause a great damage to the company's reputation.

- (D) Unhappy customers can damage a company's reputation by filing complaints in the consumer court.

69. According to the passage, what was the primary reason for American Airlines being designated as 'most hated' on social media in October 2011?

- (A) The customer who was not happy with the service provided by American Airlines used social media to publicize his experience which resulted in American Airlines being designated as the 'most hated' on social media.
- (B) American Airlines, instead of apologizing and promising a better service in the future, tried to pay the customer who was not happy with their service to stop publicizing his experience which was not received well by the users of social media.
- (C) The service of American Airlines was poor in general and the example of the customer provided in the passage is only one among many.
- (D) The incident of the customer given in the passage may or may not have played a part in American Airlines being designated as 'most hated' on social media and there is not enough information given in the passage to deduce the exact reason.

70. The changes introduced by KFC and Maxwell House Coffee, as mentioned in the passage, would best be described as

- (A) oxymoronic. (B) paradoxical.
- (C) superficial. (D) chicane.

PASSAGE – II

Police-induced false confessions have long been recognized as one of the leading causes of miscarriages of justice in America. Nevertheless, the incidence and prevalence of false confessions is not presently known.

There are at least three reasons why this statistic has eluded investigators. First, for the most part custodial interrogation is conducted in secret: Police question suspects in private, and typically do not record the entire interrogation in stenographic, audio or video form. Second, police do not keep records or collect statistics on the number

or frequency of accusatory interrogations they conduct. Therefore, we know neither how often suspects are interrogated nor how often they confess, whether truthfully or falsely. Third, many cases of false confession are likely to go entirely unreported. Even in reported cases it is frequently difficult to unequivocally establish the ground truth about the crime, especially since in confession driven prosecutions the suspect is likely to be convicted. Because it is not possible to reliably estimate the actual number of unknown false confessions, it is also impossible to estimate how often false confessions lead to wrongful convictions.

Nevertheless, at least three sources of empirical evidence suggest that false confessions occur regularly: case studies, laboratory research, and these authors' published and unpublished study of interrogations that result in false confession. First, in recent years scholars and journalists have documented numerous cases of psychologically induced false confessions in America. Because a multitude of factors contribute to false confessions going unnoticed, unreported or unacknowledged, it is reasonable to presume that the reported cases represent the tip of the iceberg. Only the most egregious and high profile cases involving demonstrably false confessions are likely to be written about in the academic or the popular literature.

Second, psychological research has demonstrated through controlled laboratory experimentation that a very commonly used interrogation technique has a coercive impact on suspects and is thus likely to be a source of false confession. Kassin and McNall (1991) examined how the sentencing expectations of seventy-five subjects were affected by the two prongs of the accident strategy: "maximization" (i.e., exaggerating the strength of the evidence, magnitude of the charges, or seriousness of the offense) and "minimization" (i.e., playing down the strength of the evidence, magnitude of the charges or seriousness of the offense). Using the video-tape of a police interrogation and accompanying transcript but varying the information presented, Kassin and McNall (1991) found that through "pragmatic implication," maximization effectively communicates a threat of harm, while minimization communicates a promise of leniency. The technique is advocated by the leading interrogation training manual and commonly used in practice.

Reading "between the lines," suspects exposed to these tactics infer harsh or lenient sentencing outcomes just as if the differing consequences had been blatantly threatened or promised. Both direct and indirect techniques for communicating threats or promises rely on the same logic to precipitate a suspect's decision to confess. They change the result of the person's rational calculation about what to do through the introduction of a strong incentive to confess, and/or a strong disincentive to remain silent. The modern interrogator's shift from a direct to an indirect method for communicating benefits or harms is little more than a method for eliciting confessions by circumventing well-established legal protections.

Third, these authors have discovered numerous examples of probable or confirmed false confessions. One line of research involves the analysis of well over 150 interrogation transcripts, and the analysis of sworn testimony describing interrogations. The second line involves studying nearly 200 interrogations, interviewing approximately 100 police interrogators, analysing interrogation transcripts, and collecting data on approximately 175 likely or proven post-Miranda era false confessions. Both lines of inquiry have led to repeated observations of the process whereby interrogators manipulate suspects and coerce or persuade them to confess to crimes that they did not commit. In some interrogations, such as those directed against the mentally handicapped, false confessions can be elicited rapidly and with minimal inducements. Most often, however, eliciting a false confession takes strong incentives, intense pressure and prolonged questioning.

71. Which of the following statements can be the closest inference from the author's statement when he talks about modern investigators "circumventing well-established legal protections"?
- (A) Confessions drawn through pragmatic implication cannot be used to convict a suspect in the court of law.
 - (B) Any technique, direct or indirect, that communicates threats and impacts a suspect's decision to confess is illegal.
 - (C) Eliciting a confession from a suspect by directly threatening or by directly communicating benefits to the suspect is illegal.
 - (D) It is easier and less time consuming to obtain a confession using indirect methods rather than through direct methods.
72. Which of the following instances most accurately represents an example of maximization technique?
- (A) An interrogator threatens the suspect that unless he confesses, the interrogation is not going to end.
 - (B) An interrogator tells the suspect that officers found his finger prints on the murder weapon, even if they did not.
- (C) An interrogator tells the suspect that the crime is justified because the victim would have provoked him.
- (D) An interrogator seemingly sympathizes with the suspect and tries to elicit more information from the suspect.
- DIRECTIONS** for questions 73 and 74: Select one or more answer choices according to the directions given in the question.
73. Which of the following statements represent(s) a source of empirical evidence which suggests that false confessions occur regularly?
- Select all that apply:
- (A) Academic study of high profile cases which involve false confessions.
 - (B) Research about the psychological impact of established interrogatory techniques.
 - (C) Analysis of a number of interrogation transcripts through data collection on false confessions.
 - (D) Analysing the confessions of suspects in those cases where the ground truth about the crime has been established.

74. According to the passage, which of the following statements can be inferred from the psychological research conducted through "controlled laboratory experimentation"?

Select all that apply:

- (A) The accident strategy blatantly communicates threats and/or benefits to the suspect and results in false confessions.

- (B) The accident strategy is effective for communicating threats rather than for communicating benefits.
 (C) The accident strategy coerces the suspect into providing false confession by communicating veiled threats and benefits.
 (D) The accident strategy is one of the primary techniques used for eliciting false confessions from suspects.

PASSAGE – III

All over the world, languages are being lost at an alarming rate. Field linguists do their best to preserve these languages, but find their speaker communities apathetic. "Why should I learn Wotja-Korlitt?" they ask, "It's Spanish I need to get a job." We need to look at successful languages, whose speakers are engaged with their language, to see what endangered languages can learn from them. When we do, we inevitably find that the most successful languages are those which possess a tradition of prescriptivist grammar. English has an army of armchair pedants who tell us all to never split an infinitive, that the passive should be avoided, and that prepositions must not be used to end a sentence with. French has the Academie Française to pronounce arbitrary bans on loanwords, and Spanish the Real Academia Española, which aims to ensure everybody talks like Cervantes. The Chinese are taught from an early age to regard all Sinitic languages as dialects of Mandarin.

All these languages were originally documented by their own speakers, who made up arbitrary rules to show off their own cleverness. The results are invigorating. Such rules are endlessly debated, denounced, defended and defied, and as a result, the speakers care about their language.

Contrast the situation with endangered languages. These are documented by outsiders, schooled in the descriptivist method, and content to simply record what they find. Their work may result in a Bible translation, but that is as close to arbitrary commandments as they're likely to get.

A new approach is necessary. Fieldworkers should no longer passively describe a language. They must set out to create new rules for the language, so as to stimulate the debate that keeps a language alive. As such rules must be internally unmotivated, the researcher needs to think carefully about where to obtain them. A good strategy is to copy rules from a language that the speaker community considers prestigious, as English pedants do with Latin. In South America, Spanish or Portuguese would be the first choice, although it may be wise to base rules on the European form of the language rather than the local one. This approach has two advantages – those who accept the new rule will see it as conferring the prestige of the dominant language on their own, whereas those who reject it will see the dominant language as tainted by association with the hated rule.

Other researchers may prefer to manufacture rules based on theoretical considerations. This raises the question of which framework to use for the purpose. On one level, it makes little difference, as they will all be equally incomprehensible to the speaker community, but I would recommend Metasyntactic Heuristics, since it is now understood only by two aging academics in remote English universities, and they haven't spoken to each other for 25 years.

Our fieldworkers are now reporting back from the first trials of this method. We are still analysing their findings, but one has reported spectacular results from convincing an Amazonian tribe that they are not allowed to discuss abstract concepts.

75. According to the passage, what can field linguists who are trying to prevent a language from becoming endangered learn from successful languages?

- (A) The apathy of the speakers of successful languages that can be replicated in the speaker communities of endangered languages.
(B) The importance of arbitrary rules in the successful languages which results in speakers caring about their language.
(C) The benefits provided by learning a successful language which are not present in endangered languages.
(D) The importance of academies like Academie Française for French, Real Academia Española for Spanish, in keeping a language alive.

76. The fundamental difference between the prescriptivist and the descriptivist method of studying a language, as can be inferred from the passage, is that the prescriptivist method

- (A) is used in successful languages whereas descriptivist method is used in endangered languages.
(B) results in speakers of the language becoming apathetic whereas descriptivist method results in speakers who are passionate about their language.
(C) involves creation of arbitrary rules to spark linguistic debates whereas descriptivist method involves passive description of a language.
(D) is mostly applicable for European languages whereas descriptivist method is applicable for Native American languages.

DIRECTIONS for question 78: Select one or more answer choices according to the directions given in the question.

78. According to the passage, which of the following strategies can help in keeping languages alive?

Select all that apply:

- (A) Manufacturing rules on the basis of a theoretical framework which will spark

PASSAGE - IV

The mystical approaches to the study of creativity have probably made it harder for scientific psychologists to be heard. Many people seem to believe, as they do about love, that creativity is something that just doesn't lend itself to scientific study, because it is a spiritual process. We believe that it has been hard for the scientific approach to shake the deep-seated view of some people that, somehow, scientific psychologists are treading where they should not. Equally damaging to the scientific study of creativity, in our view, has been the takeover of the field, in the popular mind, by those who follow what might be referred to as a pragmatic approach. Those taking this approach have been concerned primarily with developing creativity, secondarily with understanding it, but almost not at all with testing the validity of their ideas about it.

Perhaps the foremost proponent of this approach is Edward De Bono, whose work on lateral thinking and other aspects of creativity has had what appears to be considerable commercial success. De Bono's concern is not with theory, but with practice. For example, he suggests using a tool that focuses on the aspects of an idea that are pluses, minuses, and interesting (such as PMI). Or he suggests using the word *po*, derived from hypothesis, suppose, possible, and poetry, to provoke rather than judge ideas. Another tool, that of "thinking hats," has individuals metaphorically wear different hats, such as a white hat for data-based thinking, a red hat for intuitive thinking, a black hat for critical thinking, and a green hat for generative thinking, in order to stimulate seeing things from different points of view.

De Bono is not alone in this enterprise. Osborn (1953), based on his experiences in advertising agencies, developed the technique of brainstorming to encourage people to solve problems creatively by seeking many possible solutions in an atmosphere that is constructive rather than critical and inhibitory. Gordon (1961) also attempted to simulate creative thinking by a method called synectics, which primarily involves analogies.

More recently, authors such as Adams (1974/1986) and Von Oech (1983) have suggested that people often construct a series of false beliefs that interfere with creative functioning. For example, some people believe that there is only one right answer and that ambiguity must be avoided whenever possible. People can become creative by identifying and removing these mental blocks. Also, Von Oech has suggested that we need to adopt the roles of explorer, artist, judge, and warrior in order to foster our creative productivity.

These approaches have had considerable public visibility, in much the way that Leo Buscaglia has given visibility to the study of love. And they may well be useful. From our point of view as psychologists, however, these approaches lack any basis in serious psychological theory, as well as serious empirical attempts to validate them. Of course, techniques can work in the absence of psychological theory or validation. But the effect of such approaches is often to leave people study a phenomenon with commercialization and to see it as less than a serious endeavour for psychological

79. According to the passage, the similarity between mystical approach and the pragmatic approach to the study of creativity is that both the approaches

 - (A) contribute to the scientific study of creativity by providing knowledge about the nature of creativity.
 - (B) serve as road blocks to the scientific study of creativity.
 - (C) use techniques for fostering creativity among individuals.
 - (D) are similar to the study of love.

80. The similarity between the various pragmatic approaches proposed by the authors in the passage is that these approaches

 - (A) rely on empirical evidence to validate the theories related to these approaches.
 - (B) are easily comprehensible to the common man.
 - (C) are all commercially successful.
 - (D) provide constructs for thinking creatively.

81. According to the author, the major shortcoming common to all the pragmatic approaches mentioned in the passage is that

 - (A) these approaches do not yield any results.
 - (B) these approaches are only a means of commercializing the study of creativity.
 - (C) these approaches are not validated through evidence.
 - (D) the popularity of these approaches hinder the scientific study of creativity.

82. Which of the following would most likely be a technique in the creative thinking method called synectics mentioned in the passage?

- (A) The original problem is alienated by creating a comparable situation to develop creative solutions.
 - (B) Participants assume different roles to develop solutions with different points of view.
 - (C) Participants do not reject any theory and listen to all possible solutions with an open mind.
 - (D) The repercussions of every solution are considered so that the optimal solution can be determined.

DIRECTIONS for questions 83 and 84: Each of the following questions presents four statements, of which three, when placed in appropriate order, would form a contextually complete paragraph. Pick the statement that is not part of the context.

83. (A) Their reformist ideas, by destroying the unity of the state church, threatened to divide the people and to undermine royal authority.

(B) During the religious upheavals of the 16th century, a body of men and women called Puritans sought to reform the Established Church of England from within.

(C) Essentially, they demanded that the rituals and structures associated with Roman Catholicism be replaced by simpler Calvinist Protestant forms of faith and worship.

(D) The Calvinist Dutch restricted the radical sect of Puritans, who did not believe the Established Church could ever be reformed, mainly to low-paid laboring jobs.

84. (A) We create many negative situations by simply assuming that our expectations are self-evident and that they are clearly understood and shared by other people.

(B) In marriage, for example, a man and a woman have implicit expectations of each other in their marriage roles.

(C) Many expectations are implicit, they haven't been explicitly stated or announced but people nevertheless bring them to a particular situation.

(D) Although these expectations have not been discussed, or sometimes recognized by the

person who has them, fulfilling them makes great deposits in the relationship and violating them makes withdrawal.

DIRECTIONS for questions 85 and 86: The sentences given in each of the following questions, when properly sequenced, form a coherent paragraph. Each sentence is labeled with a letter. From among the four choices given below the question, choose the most logical order of sentences that constructs a coherent paragraph.

DIRECTIONS for questions 87 and 88: The sentences given in the following question, when properly sequenced, form a coherent paragraph. Adjacent to each sentence is provided an input box that accepts a number, from 1 to the number of statements given in the question, corresponding to its sequential position in the coherent paragraph. The sequential position(s) of one or more of the sentences is/are already provided adjacent to the sentence(s). Figure out the most logical order of sentences that constructs a coherent paragraph and then enter in the input box adjacent to each of the remaining sentences the number corresponding to the sequential position of the respective sentence in the coherent paragraph.

87. (A) By 1754, France still had a strong relationship with a number of Native American tribes in Canada and along the Great Lakes.
 (B) Thus the French threatened not only the British Empire but also the American colonists themselves, for in holding the Mississippi Valley, France could limit their westward expansion.
 (C) The British remained confined to the narrow belt east of the Appalachian Mountains.
 (D) France and Britain engaged in a succession of wars in Europe and the Caribbean throughout the 18th century.
 (E) It controlled the Mississippi River and, by establishing a line of forts and trading posts, had marked out a great crescent-shaped empire stretching from Quebec to New Orleans.
 (F) Though Britain secured certain advantages – primarily in the sugar-rich islands of the Caribbean – the struggles were generally indecisive, and France remained in a powerful position in North America.
88. (A) Their homeland remained empty of human beings for more than a century – until the arrival of new tribes, such as the Navajo and the Ute, followed by the Spanish and other European settlers.
 (B) Time-worn pueblos and dramatic cliff towns, set amid the stark, rugged mesas and canyons of Colorado and New Mexico, mark the settlements of some of the earliest inhabitants of North America, the Anasazi (a Navajo word meaning "ancient ones").
 (C) The Anasazi flourished over the centuries, developing sophisticated dams and irrigation systems; creating a masterful, distinctive pottery tradition; and carving multiroom dwellings into the sheer sides of cliffs that remain among the most striking archaeological sites in the United States today.
 (D) By 500 A.D. the Anasazi had established some of the first villages in the American Southwest, where they hunted and grew crops of corn, squash, and beans.
 (E) Yet by the year 1300, they had abandoned their settlements, leaving their pottery, implements, even clothing – as though they intended to return – and seemingly vanished into history.

DIRECTIONS for questions 89 to 91: Read each of the paragraphs and answer the questions given below.

89. Some historians think the idea of democracy arose in the Greek soldier-sailors of the 7th to 4th centuries BC who manned the trireme warships. Up to sixty men – a deme – rowed these daunting three-tiered ships. Their effectiveness in battle depended upon precise and coordinated teamwork; the phrase 'pulling together' may have its origin in the triremes. Deme-ocracy arose when the rower-fighters realized that the same kind of coordinated pulling together that powered the boat could be used to influence which battles their masters had them fight and the conditions of their service. Herodotus records that up to forty triremes were used when Samos invaded the Egyptians – a lot of voting oarsmen.

Which of the following most logically completes the above argument?

- (A) In spite of this, and two and a half thousand years on, I am optimistic that the world is glimpsing the limits of democracy.
(B) Maybe you know of other examples.
(C) Modern democracies owe a debt to the actions of these wretched fellows whose fates were gambled by rulers who did not always have the rowers' best interests at heart.
(D) To survive, these groups compete for what they see as their share of the pie.

90. Dr. Simone Kuhn: Research shows that adolescents who play video games on a regular basis are five times as likely to develop carpal tunnel syndrome as are adolescents who do not play video games. Carpal tunnel syndrome (CTS) is a medical condition in which the median nerve is compressed as it travels through the wrist at the carpal tunnel and causes pain, numbness and tingling, in the part of the hand that receives sensation from the median nerve. Pain may extend up the arm leading to discomfort extending to the shoulder and forearm. Federal legislation that prohibits the sale of video games to minors would help curb this painful wrist condition (caused due to repetitive movements associated with playing video games frequently and for long periods of time) among adolescents.

Dr. Simone Kuhn's conclusion depends on which of the following assumptions?

- (A) Most parents would refuse to purchase video games for their adolescent children.
(B) Not all adolescents who play video games on a regular basis suffer from carpal tunnel syndrome and playing video games is the only way an adolescent can develop carpal tunnel syndrome.
(C) The regular playing of video games by adolescents does not produce such beneficial effects as better hand-eye coordination and improved reaction time and positive structural brain changes in regions responsible for spatial orientation, memory formation, strategic planning, and fine motor skills.
(D) The majority of federal legislators will vote for a bill that prohibits the sale of video games to minors.

91. The violent crime rate (number of violent crimes per 1,000 residents) in city G..... is 75 percent higher now than it was five years ago. The corresponding increase for city R... is only 15 percent. These figures support the conclusion that residents of city G..... are more likely to become victims of violent crime than are residents of city R....

The above argument is flawed because it fails to take into account

- (A) the ratio of violent to nonviolent crimes committed during the past five years in city G..... and city R....
- (B) changes in the population density of both city R... and city G..... over the past five years.
- (C) how the rate of population growth in city G..... over the past five years compares to the corresponding rate for city R....
- (D) the violent crime rates in city G..... and city R... five years ago.

DIRECTIONS for questions 92 to 95: In each of the following questions, there are sentences or fragments of sentences that form a paragraph. Identify and select the sentence(s) or fragments of sentence(s) that is/are correct in terms of grammar and usage, including spelling, punctuation and logical consistency.

Select all that are correct:

92. (A) Carlos Castaneda's extraordinary journey into the world of sorcery has captivated million of Americans. In his eagerly awaited new book, he takes the reader
- (B) into a sorceric experience as intense, as terrifying, and as profoundly disturbing that it can only be described as a brilliant assault on the reason, the dramatic
- (C) and frightening attack on every preconceived notion of life that is Don Juan's remarkable legacy to his apprentice. At the center of the book is a new and formidable figure,
- (D) Dona Soledad, a woman who's powers are turned away against Castaneda in a struggle that almost consumes him. In Dona Soledad, Carlos Castaneda has recorded
- (E) for the reader the feelings of a remarkable woman who despite her sorceric gifts expresses some of the deepest and basic feminine concerns and ambitions.

93. (A) The admiration for Latin was a legacy from its use as the language of the church in Middle Ages, and as the common language of European scholarship from Renaissance onwards.
- (B) It was widely regarded as the most perfect of languages – Ben Johnson speaks of it as 'the queen of tongues' – and great emphasis was placed on learning to write it 'correctly'.
- (C) It was taught in schools, and Latin grammar was used as a model for the description of all other languages – but dissimilar – despite the fact that it was no longer anyone's native tongue.

- (D) Because of the emphasis on replicating the Latin of the 'best authors', people felt that there ought to be a fixed 'correct' form for any language, including English.
- (E) English was viewed by many as having slipped down from the classical purity of Latin by losing its endings.

94. (A) To adopt a relational paradigm for services marketing offers obvious promises. For managers, strong and stable customer relationships
- (B) delivers favorable word of mouth, justifies price premiums, reduces employee training costs, and even lowers staff turnover, all of which leads to higher firm profits.
- (C) This paradigm not only rejuvenates scholarly research into satisfaction and customer loyalty but promotes constructs such as firm trust and commitment.
- (D) Secondly, it stimulates cross-level studies that bridge customer- and firm-level domains, enabling us to examine how firms develop, sustain, and benefit from strong customer relations.
- (E) Yet, neither research nor managerial promises have materialized fully, and questions remain regarding the power of the well-accepted linkage of satisfaction to trust and thence to loyalty.

95. (A) In 1975, when I was six months elder than my brother, my parents moved from Kesswil on Lake Constance to Laufen, the castle and vicarage above the Falls of the Rhine.
- (B) My memories begin at my second or third year. I recall the vicarage, the garden, the laundry house, the church, the castle, the Falls, the small castle of Worth, and the sexton's farm.
- (C) These are nothing but islands of memory afloat in a sea of vagueness, each by itself, with no connection apparently between them. One memory comes up
- (D) which is perhaps the earliest of my life, and is, indeed, only a rather hazy impression. I am lying in a pram, in the shade of a tree. It is a fine, warm summer day,
- (E) the sky is blue, and golden sunlight is darting at green leaves. I have just awakened to the glorious beauty of the day, and have a sense of indescribable well-being.

DIRECTIONS for questions 96 and 97: Each of the questions has a statement. Pick from the options, the most appropriate restatement of the given statement. Note that all the choices may be grammatically correct but you have to select the one that is closest in meaning to the given statement.

96. The modern academic and professionalized study of history has divorced the genre from learning that compares different eras, and has thereby been able to examine societies far different from the historian's own, without the sense that these societies either

had anything to teach or contributed in any way to the identity of the examining society.

- (A) Modern history is about societies and eras that are significant on their own and have not drawn from, or contributed to, any others.
- (B) Today's historian studies societies and eras that are significant on their own and is therefore not influenced by others that they have drawn from, or contributed to.
- (C) The modern day historian studies societies and eras for their relative significance and is not unaware of the possibilities that these could have contributed to any others, even her own.
- (D) Today's historian studies societies and eras for their own significance alone and is therefore not influenced by the possibilities that these could have contributed to any others, even her own.

97. So long as there remained an optimistic view of what it meant to be humans, so long as humans were regarded as exceptional beings and so long as science was seen as part of the broader project of humanity asserting control over nature, then a fully mechanistic view of man remained unacceptable, even to most scientists.

- (A) To most scientists even a fully mechanistic view of man remained unacceptable as long as there remained an optimistic view of what it meant to be a human, humans were regarded as exceptional beings and science was seen as part of the broader project of humanity asserting control over nature.
- (B) So long as there remained an optimistic view of what it meant to be human, so long as humans were regarded as exceptional beings and so long as science was seen as part of the broader project of humanity asserting control over nature, a fully mechanistic view of man remained unacceptable even to most scientists.
- (C) A fully mechanistic view of man remained unacceptable even to most scientists, till such time as there remained an optimistic view of what is meant to be human. Humans were regarded as exceptional beings and science was seen as part of the broader project of humanity asserting control over nature.
- (D) As there remained an optimistic view of what it meant to be human, as humans were regarded as exceptional beings, as science was seen as part of the broader project of humanity asserting control over nature, a fully mechanistic view of man remained unacceptable even to most scientists.

DIRECTIONS for question 98: The question has a set of four sequentially ordered statements. Classify each statements into Fact, Inference and Judgement based on the following criteria and then type the corresponding letter in the input box adjacent to the statement, as indicated below:

- **Fact:** deals with information that one has seen, heard or read; is a known matter of direct observation or existing reality and is open to discovery or verification. (Indicate such a statement with an 'F' in the input box)
- **Inference:** is a logical conclusion or deduction drawn about the unknown, on the basis of the

known, i.e., based on the knowledge of facts. (Indicate such a statement with an 'I' in the input box)

- **Judgment:** is an opinion, estimate or anticipation of common sense or intention that implies approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future. (Indicate such a statement with a 'J' in the input box)

98. (i) While they maybe defiers of convention, pushing the edge as they slice through walls of water, surfers are traditionalists by nature.
- (ii) For more than 40 years, quality has been Gordon Clark's middle name with 9 out of 10 wave riders relying on his surfboards.
- (iii) Last December, when the old man slammed shut the doors of Clark Foam, in Laguna Niguel, California, he unleashed a tsunami; but Clark's departure may turn out to be the best thing to happen to the sport.
- (iv) Companies like California's Firewire Surfboards and France's Solomon have caught the attention of high-ranking pros by bringing innovative materials and construction methods to surfboards, some that had already worked wonders for skis, snowboards and the wings of Boeing Dreamliners.

DIRECTIONS for question 99: The question has a main statement followed by a set of four question statements. Classify each question statement into Upstream argument, Downstream argument, Lateral argument and Irrelevant argument based on the following criteria and then type the corresponding letter in the input box adjacent to the statement, as indicated below:

- **Upstream argument:** if the main statement can be derived from the question statement (Indicate such a statement with a 'U' in the input box)
- **Downstream argument:** if the question statement can be derived from the main statement (Indicate such a statement with a 'D' in the input box)
- **Lateral argument:** if the question statement supports the main statement (Indicate such a statement with an 'L' in the input box)
- **Irrelevant argument:** if the question statement is not relevant to the main statement (Indicate such a statement with an 'I' in the input box)

99. Forget a sit down dinner in a private restaurant room. Unfazed by the credit crunch and economic downturn, today's wealthy elite are renting entire hotels, taking over resorts and booking every room on a cruise ship to guarantee that ultimate luxury: complete privacy for themselves and their guests.

- (i) The entire party often travels by private jet or yacht, and the only thing expected of them is that they have a good time at the host's expense.
- (ii) "If you can afford it, you want to be in an environment where there are no strangers", says Fred Varnier, general manager of the Sea Breeze resort.

- (iii) In the past, such all-expenses paid extravaganzas typically took place only for weddings or family reunions but now the growing ranks of the young and wealthy, as well as rich retirees who realize that they can't take their fortunes with them, are booking entire venues for less momentous occasions.
- (iv) When Switzerland's Hilton Hotel launched a 'Rent-a-private-resort' package, they expected it to be used mainly for corporate retreats but 40 percent of the bookings are from individuals and not businesses.

DIRECTIONS for question 100: The question has a main argument followed by a set of five question statements. Each question statement has an input box placed adjacent to it. Study each question statement in the light of what is said in the main argument and classify it as indicated below:

- **Logically concluded from:** if the question statement can be logically concluded from the main argument. (Indicate such a statement with an 'L')
- **Contradictory to:** if the statement contradicts the main argument. (Indicate such a statement with a 'C')
- **Far-fetched conclusion:** if the question statement is a far-fetched conclusion drawn from the main argument. (Indicate such a statement with a 'F')
- **Irrelevant:** if the question statement is irrelevant to the main argument. (Indicate such a statement with an 'I')

Enter the appropriate letter in the input box adjacent to each question statement as indicated above:

100. Fusion is the process that powers the sun and other stars. While fusion's more familiar nuclear sister, fission, consists of the breaking up of heavier nuclei such as uranium and plutonium into light ones, fusion is when light nuclei combine or fuse to form a heavier element. Large quantities of energy are released during both processes. However fusion requires extremely high temperatures of over 100 million degree celcius – similar to those found at the core of the sun. Moreover, to produce energy that can be exploited for commercial purposes, this fusion reaction must be controlled and sustained over a long period of time.

- (i) For its supporters, fusion holds the key to solving what is possibly the greatest challenge facing the world today – meeting ballooning energy needs.
- (ii) In the West many governments have cooled in their enthusiasm for fusion research.
- (iii) The resultant gap in fusion research in the West is being filled by Asian countries such as China and India and it is clear that the balance of power is increasingly leaning Eastwards.
- (iv) With the setting up of a fusion project in Hefei, the capital city of Anhui with the aim of converting sea water into energy, our energy requirements in the immediate future look to be easily met.
- (v) While China has taken the lead, it is not alone in its fusion ambitions as India and South Korea are also working on fusion projects.