## **Proctored Mock CAT-6 2012**

## Section - I

1. If [x] represents the greatest integer less than or equal to x, then the value of

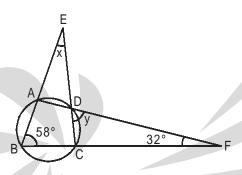
 $\left[251^{\frac{1}{3}}\right] + \left[252^{\frac{1}{3}}\right] + \left[253^{\frac{1}{3}}\right] + \dots + \left[350^{\frac{1}{3}}\right]$  is

(a) 600

(c)560

(d) 608

In the figure given below, AF, BF, BE and CE are straight lines. If the points A, B, C and D are 2. concyclic, what is the value of y - x?



(a)  $26^{\circ}$ 

(b)  $32^{\circ}$ 

(c)  $30^{\circ}$ 

(d) None of these

3. Rancho first travelled from A to B and then from B to C. The distance between A and B and the distance between B and C were in the ratio 2:3. Rancho's average speed between A and B and his average speed between B and C were in the ratio 5: 4. If Rancho's average speed for the entire journey was 40 km/hr, what was his average speed (in km/hr) between A and B?

(a) 36.8

(b) 46

(c)54

(d) 27.6

4. A rectangular sheet can be divided into two parts by breaking it along its length or its width. What is the least number of steps required to divide a rectangular sheet of size m x n into equal sheets of size  $1 \times 1$ ?

(a) |m - n| + 1

(b) mn - 1

(c) mn + 1

(d) m<sup>2</sup>n

Find the last two digits of 32<sup>222</sup>. 5.

(a) 34

(b) 76

(c) 24

(d) None of these

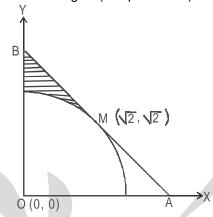
'a' and 'b' are the roots of the equation  $2x^2 - 7x - 10 = 0$ , where a > b. If  $Z_n = a^n - b^n$  for n > 0, then 6. find the value of  $\frac{2Z_6 - 10Z_4}{Z_E}$ .

(a) 6

(c) 12

(d) 14

- 7. One day each member of Ram's family consumed some milk and some water. Though the quantities of milk and water varied for the family members, the total consumption of the two liquids was exactly 7 litres for each family member. If Ram had one-fourth of the total milk consumed and one-sixth of the total water consumed, then what was the ratio of the quantity of milk to that of water consumed by Ram on that day?
  - (a) 3:2
- (b) 1:1
- (c) 2:3
- (d) Cannot be determined
- 8. In the figure given below, a quadrant of a circle of radius 2 units is drawn. If it touches the line AB at point M, what is the area of the shaded region (in square units)?



(a)  $1 - \frac{\pi}{2}$ 

- (b)  $4 \pi$
- (c)  $2 \pi$
- (d)  $2 \frac{\pi}{2}$

Directions for questions 9 to 11: Answer the questions on the basis of the information given below.

The table given below shows the number of students in a school in five different classes during the period 2007-08 to 2011-12. All the students who pass their annual exams are promoted to the next class at the end of the academic year and those who fail have to repeat the same class next year. The school admits students only in Class 8th.

		Year				
Class	2007-08	2008-09	2009-10	2010-11	2011-12	
8th	130	96	82	72	94	
9th	134	132	99	79	71	
10th	121	129	125	109	88	
11th	103	115	129	114	102	
12th	101	116	133	136	118	

The table given below shows the number of students who failed in Class 8th in each academic year during the given period.

2007-08	2008-09	2009-10	2010-11	2011-12
16	8	11	7	13

- 9. How many students were admitted in Class 8th in the period 2008-09 to 2011-12?
  - (a) 300

(b) 302

(c) 432

- (d) 344
- 10. In how many classes did more than 10% students fail in 2009-10?
  - (a) 5

(b) 4

(c) 3

(d)2

<ul> <li>14. In ΔABC, D, E, F and G are the midpoints of the sides BC, AD, BE and FD respectively. What the ratio of the area of ΔEGD to that of ΔAEC?  (a) 1:16 (b) 1:4 (c) 4:1 (d) 16:1</li> <li>15. A natural number consists of only 0's and 1's. If the number is divisible by 375, then what is the lead possible number of 0's and 1's in the number respectively?  (a) 6 and 3 (b) 3 and 6 (c) 6 and 9 (d) None of these</li> <li>16. A sum of ₹A² is borrowed for 5 years at r% per annum rate of interest with annual compounding an annual installment of ₹A is paid towards the loan, what is the relation between A and r?  (a) A = 1/(1+1/100)<sup>5</sup> - 1 (b) A = 1/(1+1/100)<sup>5</sup> - 1 (c) A = 100/(1+1/100)<sup>5</sup> - 1 (d) A = 1 - (1/(1+1/100)<sup>5</sup> - 1)</li> <li>17. A man is running in a railway tunnel. When he has covered exactly two-fifth of the length of the tunnel he sees a train approaching the tunnel from behind. He realises that irrespective of the direction in which he runs he will be hit by the train at one of the ends of the tunnel. If the speed the man is 10 km/hr, find the speed of the train.  (a) 60 km/hr (b) 50 km/hr (c) 40 km/hr (d) 30 km/hr  18. A shopkeeper has 2721 apples, 3081 bananas and 3501 peaches, He makes baskets of these fru such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (&lt; x) fruits of each type. Find the maximum possible value of x.  (a) 1 (b) 10 (c) 15 (d) 60</li> <li>Page 3</li> <li>Proctored Mock CAT-6 20</li> </ul>		(a) 12.10%	(D) 25.62%	(C) 34.44%	(a) 41.76%
<ul> <li>A natural number consists of only 0's and 1's. If the number is divisible by 375, then what is the lead possible number of 0's and 1's in the number respectively? <ul> <li>(a) 6 and 3</li> <li>(b) 3 and 6</li> <li>(c) 6 and 9</li> <li>(d) None of these</li> </ul> </li> <li>A sum of ₹A² is borrowed for 5 years at r% per annum rate of interest with annual compounding an annual installment of ₹A is paid towards the loan, what is the relation between A and r?</li> <li>(a) A = 100/(1 + 100) 5 - 1</li> <li>(b) A = 100/(1 + 100) 5 - 1</li> <li>(c) A = 100/(1 + 100) 5 - 1</li> <li>(d) A = 1 - (1/(1 + 1/(100)) 5 - 1)</li> <li>A man is running in a railway tunnel. When he has covered exactly two-fifth of the length of the tunnel he sees a train approaching the tunnel from behind. He realises that irrespective of the direction in which he runs he will be hit by the train at one of the ends of the tunnel. If the speed the man is 10 km/hr, find the speed of the train. <ul> <li>(a) 60 km/hr</li> <li>(b) 50 km/hr</li> <li>(c) 40 km/hr</li> <li>(d) 30 km/hr</li> </ul> </li> <li>A shopkeper has 2721 apples, 3081 bananas and 3501 peaches. He makes baskets of these fru such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (&lt; x) fruits of each type. Find the maximum possible value of x. <ul> <li>(a) 1</li> <li>(b) 10</li> <li>(c) 15</li> <li>(d) 60</li> </ul> </li> </ul>	14.	•	•		and FD respectively. What is
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an annual installment of ₹A is paid towards the loan, what is the relation between A and r?  (a) A = \frac{1}{\left(1 + \frac{\rm{r}}{100}\right)^5 - 1}  (b) A = \frac{100}{\rm{r}\left(1 + \frac{\rm{r}}{100}\right)^5 - 1\right\}  (c) A = \frac{100}{\rm{r}\left(1 + \frac{\rm{r}}{100}\right)^5}  (d) A = 1 - \left(\frac{1}{1 + \frac{\rm{r}}{100}\right)^5}  17. A man is running in a railway tunnel. When he has covered exactly two-fifth of the length of the tunnel he sees a train approaching the tunnel from behind. He realises that irrespective of the direction in which he runs he will be hit by the train at one of the ends of the tunnel. If the speed the man is 10 km/hr, find the speed of the train.  (a) 60 km/hr  (b) 50 km/hr  (c) 40 km/hr  (d) 30 km/hr  18. A shopkeeper has 2721 apples, 3081 bananas and 3501 peaches. He makes baskets of these fru such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (< x) fruits of each type. Find the maximum possible value of x.  (a) 1  (b) 10  (c) 15  (d) 60	15.	possible number of 0'	's and 1's in the number	respectively?	
(c) A = $\frac{100}{r} \left\{ 1 - \frac{1}{\left(1 + \frac{r}{100}\right)^5} \right\}$ (d) A = $1 - \left(\frac{1}{1 + \frac{r}{100}}\right)^5$ 17. A man is running in a railway tunnel. When he has covered exactly two-fifth of the length of the tunnel he sees a train approaching the tunnel from behind. He realises that irrespective of the direction in which he runs he will be hit by the train at one of the ends of the tunnel. If the speed the man is 10 km/hr, find the speed of the train.  (a) 60 km/hr  (b) 50 km/hr  (c) 40 km/hr  (d) 30 km/hr  18. A shopkeeper has 2721 apples, 3081 bananas and 3501 peaches. He makes baskets of these fruic such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (< x) fruits of each type. Find the maximum possible value of x.  (a) 1  (b) 10  (c) 15  (d) 60	16.	A sum of ₹A <sup>2</sup> is borro an annual installment	owed for 5 years at r% pe t of ₹A is paid towards th	er annum rate of interest ne loan, what is the relat	with annual compounding. If ion between A and r?
<ul> <li>17. A man is running in a railway tunnel. When he has covered exactly two-fifth of the length of the tunnel he sees a train approaching the tunnel from behind. He realises that irrespective of the direction in which he runs he will be hit by the train at one of the ends of the tunnel. If the speed the man is 10 km/hr, find the speed of the train. <ul> <li>(a) 60 km/hr</li> <li>(b) 50 km/hr</li> <li>(c) 40 km/hr</li> <li>(d) 30 km/hr</li> </ul> </li> <li>18. A shopkeeper has 2721 apples, 3081 bananas and 3501 peaches. He makes baskets of these fruits such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (&lt; x) fruits of each type. Find the maximum possible value of x. <ul> <li>(a) 1</li> <li>(b) 10</li> <li>(c) 15</li> <li>(d) 60</li> </ul> </li> </ul>		(a) $A = \frac{1}{\left(1 + \frac{r}{100}\right)^5 - 1}$		(b) A = $\frac{100}{r \left\{ \left( 1 + \frac{r}{100} \right)^5 \right\}}$	<del>-1</del> }
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such that the number of fruits of each type in a basket is either 'x' or 0. In the end the shopkeep is left with p (< x) fruits of each type. Find the maximum possible value of x.  (a) 1 (b) 10 (c) 15 (d) 60	17.	tunnel he sees a trai direction in which he the man is 10 km/hr,	in approaching the tunr runs he will be hit by the find the speed of the tra	nel from behind. He rea train at one of the ends in.	lises that irrespective of the of the tunnel. If the speed of
Page 3 Proctored Mock CAT-6 20	18.	such that the number is left with p (< x) fruit	of fruits of each type in ts of each type. Find the	a basket is either 'x' or ( maximum possible value	O. In the end the shopkeeper ue of x.
	Page	3	₩CL	MBA Test Prep	Proctored Mock CAT-6 2012

What was the absolute difference between the total number of students who passed in the five

(c) 79

(c)  $\frac{1}{3}$ 

A car dealer made 10% profit in the year 2009 on a particular model. In 2010, he increased the selling price of the model by 10% due to a hike of 10% in its cost price. However, in 2011, he again increased the selling price by 10% despite a fall of 10% in the cost price over 2010. What was his

(d) None of these

(d) None of these

classes together in 2008-09 and that in 2010-11?

(b) 78

(b)  $\frac{1}{6}$ 

profit percentage on the model in the year 2011?

What is the minimum value of the expression  $\frac{x^2 + x + 1}{x^2 - x + 1}$  for real values of 'x'?

11.

12.

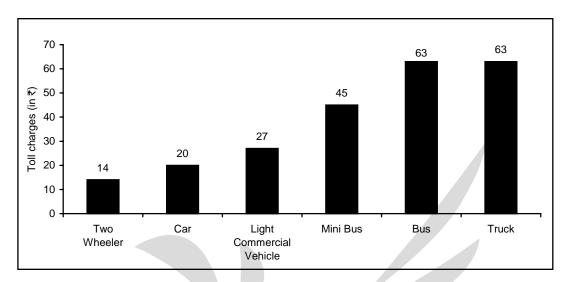
13.

(a) 77

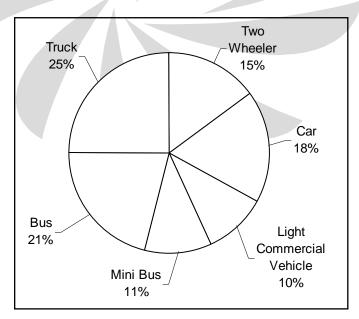
(a) 1

Directions for questions 19 to 21: Answer the questions on the basis of the information given below.

The bar graph given below shows the amount (in ₹) to be paid by the different types of vehicles to cross a Toll Plaza.



The pie chart given below shows the percentage break-up of the types of vehicles that crossed the Toll Plaza on 16th July, 2012.



- 19. If the amount collected from Trucks on the Toll Plaza was ₹18,900 on the mentioned date, what was the total amount collected from Mini Buses and Buses on that day?
  - (a) ₹21,816
- (b) ₹18,216
- (c) ₹12,286
- (d) None of these

	(b) Light Commercial \((c) Cars > Light Comm	ers > Light Commercial /ehicles > Cars > Two W nercial Vehicles > Two W nars > Light Commercial	Vheelers Vheelers	
21.	collected from Cars on	the mentioned date?		tage more than the amount
	(a) 233.33%	(b) 267.50%	(c) 212.54%	(d) 221.50%
22.		oir is 880 cm. How much		pase. The circumference of ervoir completely with water
	(a) ₹3,880.80	(b) ₹3,680.60	(c) ₹4,080.80	(d) ₹3,260.60
23.	How many arrangeme greater than 40,00,000		0, 2, 3, 3, 4, 4 and 5 wil	I result in an even number
	(a) 240	(b) 270	(c) 300	(d) None of these
24.	people who participate one game. At least one people who did not par	d in at least two games we person participated in ticipate in any of the thre	vas 42% more than those exactly n games, where	rent games. The number of who participated in exactly $n = 1, 2, 3$ . If the number of cossible, then what was the ames?  (d) 213
25.	If $a_n = \begin{cases} \frac{n-1}{2} ; & \text{if 'n' is} \\ \frac{n}{2} ; & \text{if 'n' is} \end{cases}$	s odd and $a_2 \times a_3 + a_4$ s even	$\times \mathbf{a}_5 + \dots + \mathbf{a}_{k-1} \times \mathbf{a}_k = 650$	O, what is the value of 'k'?
	(a) 12	(b) 13	(c) 24	(d) 25
26.	of $(a + b - c - d)^n - (a$	$^{n} + b^{n} - c^{n} - d^{n}$ ?		following is always a factor
27.	friends pulled out of the the rest of the people. ₹250 extra. The total tra	e trip at the last moment and During the journey the avelling expenses, includes had contributed an integration?	al money and hired a car and so they decided to di car required some mino ing the repair charges, an	to Goa. At least one of his vide the expenses between repair for which they paid nounted to ₹410 per person. ₹100 initially, then what was
Page		(b)₹570 <b>%CL</b>	MBA Test Prep	Proctored Mock CAT-6 2012

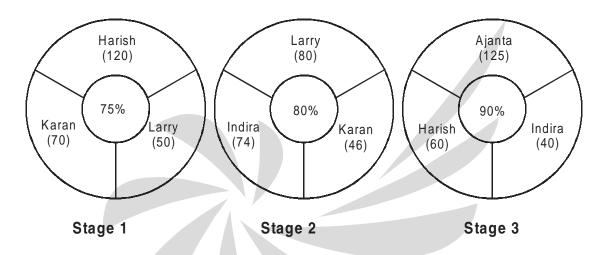
Which of the following is the correct order for the money collected through toll charges from the

different types of vehicles on the mentioned date?

20.

Directions for questions 28 to 30: Answer the questions on the basis of the information given below.

Five persons - Ajanta, Harish, Indira, Karan and Larry - took a three-stage test on a particular day. In each of the diagrams given below, the three outer regions show the top three scorers and their individual scores in that stage. The inner circle in each diagram denotes the sum of the scores of the top three scorers as a percentage of the sum of the scores of the five people. In none of the stages did any two persons get an equal score. Two performance indices were calculated for each person based on his/her scores in various stages. The **HL Index** of a person is the difference between his/her highest and lowest scores in the three stages while the **Mean Index** is the middle score if his/her scores are arranged in increasing/decreasing order. It is also known that each person scored a minimum of 10 in each stage and all the scores were natural numbers.



- 28. For how many persons is it possible to calculate the Mean Index?
  - (a) 0

(b) 1

(c) 2

- (d) More than 2
- 29. If the HL Index for Indira was 34, then what was the minimum possible score of Ajanta in the three-stage test?
  - (a) 162

- (b) 164
- (c) 166

- (d) None of these
- 30. Who scored the lowest among the five persons in the three-stage test?
  - (a) Karan
- (b) Indira
- (c) Larry
- (d) Cannot be determined

## Section - II

- 31. Five sentences are given below, labeled A, B, C, D and E. They need to be arranged in a logical order to form a coherent paragraph/passage. From the given options, choose the most appropriate one.
  - A. Speech contains nonverbal elements known as paralanguage, including voice quality, rate, pitch, volume, and speaking style, as well prosodic features such as rhythm, intonation, and stress.
  - B. Nonverbal messages could also be communicated through material exponential; meaning, objects or artifacts (such as clothing, hairstyles or architecture).
  - C. Likewise, written texts have nonverbal elements such as handwriting style, spatial arrangement of words, or the physical layout of a page.
  - D. Messages can be communicated through gestures and touch, by body language or posture, by facial expression and eye contact.
  - E. Nonverbal communication is usually understood as the process of communication through sending and receiving wordless (mostly visual) messages between people.

(b) ABCDE

(c) EACDB

32.	order to form a coh	•		need to be arranged in a long, choose the most approp	_			
	one.							
		<ul> <li>A. The entire system of things that is the Universe encompasses the very large and the very small         <ul> <li>the astronomical scale of stars and galaxies and the microscopic world of elementary particles.</li> </ul> </li> </ul>						
	B. Cosmology is	everything that exists.						
	C. This is an amb	C. This is an ambitious goal, and significant gaps in our knowledge still remain.						
	D. Nevertheless, to of a 'Golden Ag		progress that many cosm	nologists regard this as some	∍thing			
	E. The aim of conframework.	smology is to place all	known physical pheno	omena within a single coh	erent			
	(a) BEACD	(b) ADBCE	(c) BECAD	(d) BAECD				
33.		•	•	need to be arranged in a lo	•			

- one.
  - A. Most writers have no trouble compiling a list of legal or other definitions running into dozens, and then adding their own to it.
  - B. Both political and academic efforts to get to grips with terrorism have repeatedly been hung up on the issue of definition, of distinguishing terrorism from criminal violence or military action.
  - C. Why the difficulty?

(a) EDBAC

- D. It is applied to them by others, first and foremost by the governments of the states they attack.
- E. In a word, it is labeling, because 'terrorist' is a description that has almost never been voluntarily adopted by any individual or group.

(a) CBADE	(b) BEDCA	(c) ABDCE	(d) BACED
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(d) ECADB

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	(a)	1 and 2	(b) 1 and 3	(c) Only 3	(d) 2 and 4
		them for its culture The film, which tells	and its steady income.	heard so many times, p	life, which is as important to prompted reflection on how
		The community has eking a living from t	s worked the mud and ri he small finds they make	vers of their territory for e.	r decades, even centuries,
	1.	small-scale gold mi		rtment of Colombia and	Ilm is about a community of I their resistance against a
36.	or		s) that is/are incorrect in		ph. Identify the sentence(s) I usage. Then, choose the
	(a)	2 and 3	(b) 1 and 2	(c) Only 3	(d) 1 and 4
	2.	the party meet wou Mr. Modi's own amb A second term for M The joke in BJP circ	ld record his displeasure pition to move to a nation ∕r. Gadkari is also likely	e at the RSS moves in the nal role in the party coul to be opposed to by oth Modi to attend a party r	d be tied up with this. her senior party leaders. national executive meeting,
35.	or		s) that is/are incorrect in		ph. Identify the sentence(s) I usage. Then, choose the
	(a)	1 and 3	(b) 2 and 4	(c) 2 and 3	(d) 1, 2 and 4
	<ol> <li>Experts have been reigning in forecasts for global oil demand in the near-term.</li> <li>At the same time, Saudi Arabia and other oil-rich countries increased production.</li> <li>For Tuesday, the big question was where Europe is headed.</li> <li>Greece is an absolute mess and it's translating into a weaker euro.</li> </ol>				

Given below are four sentences or parts of sentences that form a paragraph. Identify the sentence(s)

or part(s) of sentence(s) that is/are incorrect in terms of grammar and usage. Then, choose the

34.

most appropriate option.

- 37. Aadi, Bukka, Chitta, Deven, Emaan, Farrar and Ganesh are standing in a queue, not necessarily in the same order. Chitta is either the first or the last person in the queue. Ganesh is standing immediately in front of neither Aadi nor Farrar. Bukka is standing immediately in front of Ganesh. Aadi is standing immediately in front of neither Bukka nor Farrar. Bukka is not the first person in the queue. Farrar is standing immediately in front of Chitta. Who is standing immediately in front of Emaan?
  - (a) Aadi (b) Ganesh (c) Deven (d) Cannot be determined

**Directions for questions 38 to 40:** The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.

Foucault's idea of an archaeology of thought is closely linked to the modernist literary idea that language is a source of thought in its own right, not merely an instrument for expressing the ideas of those who use it. Here, however, the project is not to open up, through transgression or withdrawal, a field for language itself to 'speak'. Rather, Foucault begins with the fact that, at any given period in a given domain, there are substantial constraints on how people are able to think. Of course, there are always the formal constraints of grammar and logic, which exclude certain formulations as gibberish (meaningless) or illogical (self-contradictory). But what the archaeologist of thought is interested in is a further set of constraints that, for example, make it 'unthinkable' for centuries that heavenly bodies could move other than in circles or be made of earthly material. Such constraints seem foolish to us: why couldn't they see that such things are at least possible? But Foucault's idea is that every mode of thinking involves implicit rules (maybe not even formidable by those following them) that materially restrict the range of thought. If we can uncover these rules, we will be able to see how an apparently arbitrary constraint actually makes total sense in the framework defined by those rules. Moreover, he suggests that our own thinking too is governed by such rules, so that from the vantage point of the future it will look quite as arbitrary as the past does to us.

Foucault's idea is that this level of analysis, of what is outside the control of the individuals who actually do the thinking in a given period, is the key to understanding the constraints within which people think. So the 'history of ideas' – where this means what is consciously going on in the minds of scientists, philosophers, et al. – is less important than the underlying structures that form the context for their thinking. We will not be so much interested in, say, Hume or Darwin as in what made Hume or Darwin possible. This is the root of Foucault's famous 'marginalization of the subject'. It is not that he denies the reality or even the supreme ethical importance of the individual consciousness. But he thinks that individuals operate in a conceptual environment that determines and limits them in ways of which they cannot be aware.

- 38. Which of the following best describes the central theme of the passage?
  - (a) The primary purpose of archaeology of thought is to understand the constraints within which people think.
  - (b) Archaeology of thought can justify what people thought in the past through understanding of the then prevalent constraints.
  - (c) How people think is determined by certain constraints, which may look arbitrary in hindsight but are justified due to implied laws/rules involved in the thinking process.
  - (d) History of ideas is less important than the underlying context for thinking.

- 39. Which of the following can be inferred from the passage?
  - (a) The laws that govern our thinking are different from the one's that governed in the past.
  - (b) The fact that we know heavenly bodies move in paths other than circles implies that the constraints which caused people to believe the opposite no longer hold good.
  - (c) If the present day constraints be similar to the constraints prevalent in the past, there would be no difference in how people would think.
  - (d) The modernist literary idea rests on the same reasoning on which the Archaeology of thought rests.
- 40. What is the tone of the passage?
  - (a) Pedantic
  - (b) Expository
  - (c) Descriptive
  - (d) Judgmental

Directions for questions 41 to 43: Answer the questions on the basis of the information given below.

Five locks – L1, L2, L3, L4 and L5 – have five distinct keys – K1, K2, K3, K4 and K5 – not necessarily in the same order. A lock can be unlocked if and only if the correct key is used. Five people – Amy, Biny, Chiny, Dina and Finn – try to unlock the locks by using different lock-key combinations. A person is awarded 2 points for each lock that he/she unlocks. The five people end up with distinct scores at the end of the exercise. The table given below shows the lock-key combinations tried by the five participants.

	L1	L2	L3	L4	L5
Amy	K5	K4	K3	K2	K1
Biny	K4	K2	K3	K5	K1
Chiny	K1	K3	K4	K5	K2
Dina	K5	K4	K3	K1	K2
Finn	K4	K2	K3	K1	K5

41.	What is the least possi (a) 0	ble score of Dina? (b) 2	(c) 4	(d) 6
				( )
42.	What is the minimum p (a) 2	ossible absolute differer (b) 4	ce between the scores (c) 6	of Amy and Dina? (d) 8
43.	If Finn scores less than (a) 16	Biny, then what is the s (b) 14	sum of the scores of Am (c) 12	y and Dina? (d) 8

**Directions for questions 44 to 46:** The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.

The proof of god's existence actually makes the hypothetical doubt of the First Meditation a little worse. I now know that there really is a being powerful enough to deceive me at every turn. But Descartes argued that since all perfections naturally go together, and since deception is invariably the product of imperfection, it follows that the truly omnipotent being has no reason or motive for deception. God does not deceive, and doubt of the deepest sort may be abandoned forever. In fact, Descartes maintained, I can now live in perfect confidence that my intellectual faculties, bestowed on me by a veracious god, are properly designed for the apprehension of truth.

But this seems to imply too much: if I have a divinely-endowed capacity for discovering the truth, then why don't I always achieve it? The problem is not that I lack knowledge of some things; that only means that I am limited. Rather, the question is why I so often make mistakes, believing what is false despite my possession of God-given mental abilities. Descartes's answer derives from an analysis of the nature of human cognition generally.

Every mental act of judgment, Descartes held, is the product of two distinct faculties: the understanding, which merely observes or perceives, and the will, which assents to the belief in question. Considered separately, the understanding (although limited in scope) is adequate for human needs, since it comprehends completely everything for which it has clear and distinct ideas. Similarly, the will as an independent faculty is perfect, since it (like the will of god) is perfectly free in every respect. Thus, god has benevolently provided me with two faculties, neither of which is designed to produce error instead of true belief. Yet I do make mistakes, by misusing my free will to assent on occasions for which my understanding does not have clear and distinct ideas. For Descartes, error is virtually a moral failing, the willful exercise of my powers of believing in excess of my ability to perceive the truth.

- 44. The primary purpose of the passage is to
  - (a) discuss Descartes' take on how humans apprehend truth.
  - (b) support Descartes' explanation of human cognition theory which analysis why humans commit mistakes.
  - (c) prove that despite we being bestowed by God-given mental abilities, we tend to make mistakes and making mistakes is a moral failing.
  - (d) analyse why humans commit mistakes.
- 45. Which of the following can be inferred from the passage?
  - (a) Human beings who exercise right control on their understanding and will, can never make errors.
  - (b) Though the intellectual faculties have been bestowed to us by God, but they are bound by certain limitations.
  - (c) Human beings will always make mistakes if they exercise free will individually.
  - (d) God is perfect.

- 46. In reference to the passage, consider the statement, "Error is virtually a moral failing, the willful exercise of my powers of believing in excess of my ability to perceive the truth." What will make the above argument weaker?
  - (a) Nothing is beyond my comprehension because like the will of God, the intellectual faculty of will bestowed on me is also free and perfect in all respects.
  - (b) Since the intellectual faculties are God-given, therefore making no error is a moral obligation on me.
  - (c) Since intellectual faculties are designed for the apprehension of truth, therefore willful exercising of it is not an error.
  - (d) Error is not a moral failing, it is a deliberate action.

**Directions for questions 47 and 48:** Answer the questions on the basis of the information given below.

P, Q, R, S, T, X and Y are the only seven members of a family, comprising two lecturers, two doctors, one lawyer, one manager and one engineer. It is also known that:

- (i) There are exactly two married couples in the family.
- (ii) S, who is an engineer, is married to a doctor.
- (iii) No female member of the family is either an engineer or a manager.
- (iv) R, who is a lecturer, is married to P, a doctor.
- (v) No male member of the family is a lecturer.
- (vi) Y is married to S. The lawyer in the family is a male.
- (vii) Neither Q nor X is a lecturer.

47.	How many	remale members are the		
	(a) 4	(b) 3	(c) 2	(d) None of these

- 48. Which of the following combinations of the member and his/her profession can be correct?
  - (a) Q Doctor
- (b) T Manager
- (c) X Lawyer
- (d) None of these
- 49. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

It is right in principle that those should be the best loved who have contributed most to the elevation of the human race and human life. But, if one goes on to ask who they are, one finds oneself in no inconsiderable difficulties. In the case of political, and even of religious, leaders, it is often very doubtful whether they have done more good or harm. Hence I most seriously believe that one does people the best service by giving them some elevating work to do and thus indirectly elevating them. This applies most of all to the great artist, but also in a lesser degree to the scientist. To be sure, it is not the fruits of scientific research that elevate a man and enrich his nature, but the urge to understand, the intellectual work, creative or receptive.

- (a) Perhaps one did not want to be loved so much as to be understood.
- (b) It would surely be absurd to judge the value of the Talmud, for instance, by its intellectual fruits.
- (c) Scientific ideas have exerted a force on our civilization fully as great as the more tangible practical applications of scientific research.
- (d) The joy of discovery is certainly the liveliest that the mind of man can ever feel.

50. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

Beauty is not the goal of competitive sports, but high-level sports are a prime venue for the expression of human beauty. The relation is roughly that of courage to war. The human beauty we're talking about here is beauty of a particular type; it might be called kinetic beauty. Its power and appeal are universal. It has nothing to do with sex or cultural norms. What it seems to have to do with, really, is human beings' reconciliation with the fact of having a body. Of course, in men's sports no one ever talks about beauty or grace or the body. Men may profess their "love" of sports, but that love must always be cast and enacted in the symbology of war: elimination vs. advance, hierarchy of rank and standing, obsessive statistics, technical analysis, tribal and/or nationalist fervor, uniforms, mass noise, banners, chest-thumping, face-painting, etc.

- (a) Regardless, the truth is that TV sports is to live sports pretty much as Mills & Boons is to the felt reality of human love.
- (b) For reasons that are not well understood, war's codes are safer for most of us than love's.
- (c) The real discussion is more about a spectator's experience of Sports, and its context.
- (d) The more combative a sport is, the more we fall in love with it.
- 51. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

One is sometimes asked about the "obstacles" that confront young writers who are trying to do good work. I should say the greatest obstacles that writers today have to get over, are the dazzling journalistic successes of twenty years ago, stories that surprised and delighted by their sharp photographic detail and that were really nothing more than lively pieces of reporting. The whole aim of that school of writing was novelty—never a very important thing in art. They gave us, altogether, poor standards—taught us to multiply our ideas instead of to condense them. They tried to make a story out of every theme that occurred to them and to get returns on every situation that suggested itself. They got returns, of a kind. But their work, when one looks back on it, now that the novelty upon which they counted so much is gone, is journalistic and thin.

- (a) A best seller was a book which somehow sold well simply because it was selling well.
- (b) The especial merit of a good reportorial story is that it shall be intensely interesting and pertinent today and shall have lost its point by tomorrow.
- (c) Today, each new day demands new ideas and the writer can never be sure whether he is going to come up with them or not.
- (d) But surprisingly the works they left behind are timeless.
- 52. Rahul tagged five envelopes of distinct colours Blue, Green, Orange, Yellow and Purple as P, Q, R, S and T, not necessarily in the same order. The five envelopes contained distinct numbers of movie tickets ranging from 1 to 5. The only envelope having fewer tickets than the Blue envelope was Q. Neither S nor the Green envelope had the highest number of tickets among the five envelopes. The sum of the number of tickets in the Yellow and the Blue envelopes was equal to the number of tickets in R, the Green envelope. If T had 1 ticket more than the Purple envelope, what was its colour?
  - (a) Orange
- (b) Blue
- (c) Purple
- (d) Cannot be determined

**Directions for questions 53 to 55:** The passage given below is followed by a set of questions. Choose the most appropriate answer to each question.

The decay of sense in men waking is not the decay of the motion made in sense, but an obscuring of it, in such manner as the light of the sun obscures the light of the stars. But because amongst many strokes which our eyes, ears, and other organs receive from external bodies, the predominant only is sensible; therefore the light of the sun being predominant, we are not affected with the action of the stars. And any object being removed from our eyes, though the impression it made in us remains, yet other objects more present succeeding, and working on us, the imagination of the past is obscured and made weak this decaying sense, when we would express the thing itself, we call imagination. But when we would express the decay, and signify that the sense is fading, old, and past, it is called memory. So that imagination and memory are but one thing, which for diverse considerations have diverse names.

Much memory, or memory of many things, is called experience. Again, imagination being only of those things which have been formerly perceived by sense, either all at once or by parts at several times. The former is simple imagination, as when one imagines a man, or horse, which he has seen before. The other is compounded, when from the sight of a man at one time, and of a horse at another, we conceive in our mind a centaur. So when a man compounds the image of his own person with the image of the actions of another man, as when a man imagines himself a Hercules or an Alexander ,it is a compound imagination, and properly but a fiction of the mind. There are also other imaginations that rise in men: as from gazing upon the sun, the impression leaves an image of the sun before our eyes a long time after; and looking attentively at geometrical figures for a long time, a man shall in the dark, though awake, have the images of lines and angles before his eyes.

The imaginations during sleep are what we call dreams. And because in sense, the brain and nerves, which are the necessary organs of sense, are so benumbed in sleep as not easily to be moved by the action of external objects, there can happen in sleep no imagination, and therefore no dream. But what proceeds from the agitation of the inward parts of man's body obscures them with a more vigorous impression, a dream it seems is more clear, in this silence of sense, than are our waking thoughts. And hence for the most part, when we consider that in dreams we do not often nor constantly think of the same persons, places, objects, and actions that we do on waking, nor remember so long a train of coherent thoughts dreaming as at other times; and because waking we often observe the absurdity of dreams, but never dream of the absurdities of our waking thoughts, we are well satisfied that, being awake, we know we dream not; though when we dream, we think ourselves awake.

- 53. Which of the following will be a suitable title for the passage?
  - (a) Imagination versus memory
  - (b) Imagination and memory
  - (c) Memory and experience
  - (d) Different forms of Imagination
- 54. The author of the passage is most likely to agree with which of the statements below?
  - (a) No dreams occur in sleep.
  - (b) What occupies our thoughts when awake occupies our thoughts in sleep.
  - (c) Our waking thoughts are more absurd than our thoughts when asleep.
  - (d) Our senses are dulled in sleep.

- 55. It can be inferred from the passage that
  - (a) juxtaposition of images produces a fallacy.
  - (b) our sense of the past and the present is on an equal level.
  - (c) what we imagine is what we dream.
  - (d) imagination involves only things perceived by sense.

**Directions for questions 56 to 58:** Answer the questions on the basis of the information given below.

Nine teams participated in the fifth edition of the Indian Premier League held in April-May 2012. The tournament was organised on a double round-robin basis in which each team played the other eight teams exactly twice in the preliminary stage. In every match two points were awarded to the winning team and no points to the losing one. At the end of the preliminary stage the teams were ranked 1 to 9 on the basis of the points scored by them and the top four teams advanced to the play-off stage. If two or more teams scored equal points after the preliminary stage, their ranks were decided on the basis of their net run rates. The first match in the play-off stage called Qualifier-1 was played between the teams ranked 1 and 2 and the winner of this match advanced to the final of the tournament. The second match called Eliminator was played between the teams ranked 3 and 4. The loser of this match got eliminated from the tournament and winner went on to play the loser of Qualifier-1 in a match called Qualifier-2. The winner of Qualifier-2 met the winner of Qualifier-1 in the final of the tournament. Every match of the tournament produced a result.

without of Qualifier 1 in the initial of the tournament. Every material to the tournament produced a result.					
56.	What was the total nun	nber of matches that we (b) 74	re played in the tournam (c) 75	nent? (d) 76	
57.	What was the minimum (a) 6	number of matches that (b) 7	a team had to win to play (c) 8	the final of the tournament? (d) 5	
58.		m number of matches th nary stage of the tournal (b) 10		for the play-off stage could (d) 11	
59.	There are two gaps in t the one that fils the gap			airs of words given, choose	
	"intuition" to manage a	network of interrelated and surprise; and to	problems that require the	te	
60.	There are two gaps in t the one that fils the gap		given below. From the pa	airs of words given, choose	
		action simply to learn mo		ace, senior managers often	