

# CAT 2007 Actual Paper

## Answers and Explanations

1	2	2	5	3	1	4	3	5	4	6	5	7	3	8	2	9	1	10	1
11	4	12	2	13	3	14	2	15	4	16	4	17	1	18	5	19	2	20	4
21	3	22	3	23	2	24	1	25	4	26	1	27	4	28	5	29	5	30	1
31	4	32	3	33	5	34	2	35	3	36	5	37	1	38	2	39	5	40	1
41		42	3	43	1	44	4	45	2	46	4	47	2	48	3	49	2	50	4
51	5	52	2	53	4	54	1	55	5	56	3	57	2	58	1	59	4	60	5
61	1	62	2	63	4	64	3	65	5	66	4	67	5	68	2	69	3	70	2
71	3	72	4	73	1	74	5	75	3										

	Question number	Total questions	Total attempted	Total correct	Total wrong	Net Score	Time Taken
QA	1 to 25	25					
LRDI	26 to 50	25					
EU + RC	51 to 75	25					
Total		75					

1. 2 Sum of the odd integers in the set S

$$= \frac{n}{2}(2 \times 3 + (n-1) \times 2)$$

$$= \frac{n}{2}(2n+4) = n \times (n+2)$$

Therefore the average of the odd integers in set S =  $n + 2$

Sum of the even integers in the set S

$$= \frac{n}{2}(2 \times 2 + (n-1) \times 2)$$

$$= \frac{n}{2}(2n+2) = n \times (n+1)$$

Therefore the average of the even integers in the set S =  $n + 1$

$$\text{Therefore } X - Y = (n + 2) - (n + 1) = 1$$

2. 5 The total age of all the eight people in the family = 231

As per the information given in the question, the total age of all the people in the family

$$= 231 + 3 \times 8 - 60 + 0 = 195$$

Similarly the total age of the people in the family four years ago

$$= 195 + 3 \times 8 - 60 + 0 = 159.$$

Therefore the current average age of all the people in the family

$$\frac{159 + 32}{8} = 24 \text{ years.}$$

3. 1  $f(1) + f(2) + f(3) + \dots + f(n) = n^2 f(n)$ ,  $f(1) = 3600$ .

For  $n = 2$ :

$$\Rightarrow f(1) + f(2) = 2^2 f(2) \Rightarrow f(2) = \frac{f(1)}{(2^2 - 1)}$$

For  $n = 3$ :

$$\Rightarrow 3600 \left( 1 + \frac{1}{(2^2 - 1)} \right) + f(3) = 3^2 f(3)$$

$$\Rightarrow f(3) = 3600 \times \left( \frac{2^2}{2^2 - 1} \right) \times \left( \frac{1}{3 - 1} \right)$$

Similarly

$$f(9) = 3600 \times \frac{2^2 \times 3^2 \times 4^2 \dots \times 8^2}{(2^2 - 1)(3^2 - 1)(4^2 - 1) \dots (9^2 - 1)}$$

Therefore,  $f(9) = 80$

4. 3 Let the number of currency 1 Miso, 10 Misos and 50 Misos be x, y and z respectively.

$$\Rightarrow x + 10y + 50z = 107$$

Now the possible values of z could be 0, 1 and 2.

**For z = 0:**  $x + 10y = 107$

Number of integral pairs of values of x and y that satisfy the equation  $x + 10y = 107$  will be 11. These values of x and y in that order are

(7, 10); (17, 9); (27, 8)...

(107, 0).

**For z = 1:**  $x + 10y = 57$

Number of integral pairs of values of x and y that satisfy the equation  $x + 10y = 57$  will be 6. These values of x and y in that order are (7, 5); (17, 4); (27, 3);

(37, 2); (47, 1) and (57, 0).

**For z = 2:**  $x + 10y = 7$

There is only one integer value of x and y that satisfies the equation  $x + 10y = 7$  in that order is (7, 0).

Therefore total number of ways in which you can pay a bill of 107 Misos =  $11 + 6 + 1 = 18$

5. 4 Suppose the cheque for Shailaja is of Rs. X and Y paise

As per the question:  $3 \times (100X + Y) = (100Y + X) - 50$

$$\Rightarrow 299X = 97Y - 50$$

$$\Rightarrow Y = \frac{299X + 50}{97}$$

Now the value of Y should be a integer.

Checking by options only for  $X = 18$ , Y is a integer and the value of  $Y = 56$

6. 5  $\frac{1}{m} + \frac{4}{n} = \frac{1}{12}$ ,  $n < 60$

$$\Rightarrow \frac{1}{m} = \frac{1}{12} - \frac{4}{n} = \frac{n - 48}{12n}$$

$$\Rightarrow m = \frac{12n}{n - 48}$$

Positive integral values of m for odd integral values of n are for  $n = 49, 51$  and  $57$ .

Therefore, there are 3 integral pairs of values of m and n that satisfy the given equation.

7. 3 **Using A:**  $W_{II} = 45.5$  and  $W_I = 44.5$

**Using B:** Weight of Deepak = 70kg (Only after using statement A)

This is sufficient to find weight of Poonam using the data given in the question statement. Hence option (3) is correct choice.

8. 2 **Using A:** Inner radius of the tank is atleast 4 m. So

$$\text{volume} = \frac{4}{3} \pi r^3 \text{ where } 4 < r < 10$$

This volume can be greater as well as smaller than 400 for different  $r$ .

**Using B:** The given data gives the volume of the material of tank, which can be expressed as

$$\frac{4}{3} \pi (10^3 - r^3), \text{ which will give the value of } r \text{ which is}$$

unique and sufficient to judge if the capacity is adequate. Hence option (2) is correct choice.

9. 1 **Using A:**  $x = 30, y = 30$  and  $z = 29$  will give the minimum value.

**Using B:** Nothing specific can be said about the relation between  $x, y$  and  $z$ .

Hence option (1) is correct choice.

10. 1 **Using A:**  $\frac{OM}{OL} = \frac{2}{1}$

But if O lies on JK, maximum possible value of  $\frac{OM}{OL}$  is

$$\frac{\sqrt{2}}{1} \text{ (when O lies on K)}$$

So, Rahim is unable to draw such a square

**Using B:** Nothing specific can be said about the dimensions of the figure.

Hence option (1) is correct choice.

**For questions 11 and 12:**

Let the cruising speed of the plane and the time difference between A and B be  $y$  km/hr and  $x$  hours respectively. Distance between A and B = 3000 kilometers. For, the plane moving from city A to City B:  $3000 = (7 - x) \times (y - 50)$ . This is satisfied for  $x = 1$  and  $y = 550$ . These are the only values given in the options that satisfy the above equation.

11. 4

12. 2

**For questions 13 and 14:**

To maximise Shabnam's return we need to evaluate all the given options in the question number 7. Assume Shabnam had one rupee to invest. Let the return be denoted by 'r'.

**Consider the option (30% in option A, 32% in option B and 38% in option C):** If the stock market rises then

$$r = 0.1 \times 0.3 + 5 \times 0.32 - 2.5 \times 0.38 = 0.653$$

If the stock market falls then

$$r = 0.1 \times 0.3 - 3 \times 0.32 + 2 \times 0.38 = -0.197$$

**Consider option (100% in option A):** This will give a return of 0.1%.

**Consider option (36% in option B and 64% in option C):**

If the stock market rises then

$$r = 5 \times 0.36 - 2.5 \times 0.64 = 0.2$$

If the stock market falls then

$$r = -3 \times 0.36 + 2 \times 0.64 = 0.2$$

**Consider option (64% in option B and 36% in option C):**

If the stock market rises then

$$r = 5 \times 0.64 - 2.5 \times 0.36 = 2.1$$

If the stock market falls then

$$r = -3 \times 0.64 + 2 \times 0.36 = -1.2$$

**Consider option (1/3 in each of the 3 options):** If the stock market rises then

$$r = 0.1 \times 0.33 + 5 \times 0.33 - 2.5 \times 0.33 = 0.858$$

If the stock market falls then

$$r = 0.1 \times 0.33 - 3 \times 0.33 + 2 \times 0.33 = -0.297$$

We can see that only in option (36% in option B and 64% in option C), Shabnam gets an assured return of 0.2% irrespective of the behaviour of the stock market. So right option for questions number 13 is (0.20%) and question number 14 is (36% in option B and 64% in option C).

13. 3

14. 2

**For questions 15 and 16:**

15. 4 The number of members in the set  $S = {}^nC_2$ , where  $n$  is greater than = 4

Each member of S has two distinct numbers.

Let us say (1, 2) is one of the members of S.

To find the number of enemies each member of S will have be equal to

$${}^{n-2}C_2 = \frac{n^2 - 5n + 6}{2}$$

16. 4 Considering any two members of S, that are friends

there will be 1 number of the pairs that will be common.

The common element of these pairs will have  $n - 3$  pairs, with the remaining  $n - 3$  elements. There will be one more member made up of the remaining two constituent elements which are not same. In total there are  $n - 3 + 1 = n - 2$  other members of S that are common friends of the chosen two pairs or numbers.

**Alternative Method for questions 15 and 16:**

For  $n = 6$ , the number of elements in the set  $S = \{(1, 2), (1, 3), (1, 4), (1, 5), (1, 6), (2, 3), (2, 4), (2, 5), (2, 6), (3, 4), (3, 5), (3, 6), (4, 5), (4, 6) \text{ and } (5, 6)\}$

Lets consider the member (1, 2).

15. 4 Number of enemies for this member is 6, i.e. (3, 4), (3, 5), (3, 6), (4, 5) (4, 6) and (5, 6).

Checking by options, this is only satisfied by

$$\frac{n^2 - 5n + 6}{2}$$

Hence  $\frac{n^2 - 5n + 6}{2}$  is the correct choice.

16. 4 For  $n = 6$  let's consider the members (1, 2) and (1, 3) Friends of the member (1, 2) in the set S are (1, 4), (1, 5), (1, 6), (2, 3), (2, 4), (2, 5), (2, 6). Friends of the member (1, 3) in the set S (1, 4), (1, 5), (1, 6), (2, 3), (3, 4), (3, 5), (3, 6). The number of members of S that are common friends to the above member are 4, i.e. (1, 4), (1, 5), (1, 6), (2, 3). So the answer is  $n - 2$ .

17. 1 In each team,  $T_j$  there are two players, one it shares with  $T_{j-1}$  and other with  $T_{j+1}$ . Other  $(k - 2)$  players team  $T_j$  shares with no other team. So, total players which play for only one team.  $= (k - 2)n$   
One player is common in  $T_1$  and  $T_2$ , one in  $T_2$  and  $T_3$  and so on.  
Number of such players = number of pairs =  $n$   
So, total players =  $(k - 2)n + n = n(k - 1)$

18. 5 Let the four-digit number be denoted by  $aabb = 11 \times (100a + b)$ . Now since  $aabb$  is a perfect square  $100a + b$  should be a multiple of 11. The only pairs of values of  $a$  and  $b$  that satisfy the above mentioned condition is  $a = 7$  and  $b = 4$ . Now 7744 is a perfect square.

19. 2 Using the given data -

$$\frac{(240 + 40b + 40^2c) - (240 + 20b + 20^2c)}{240 + 20b + 20^2c} = \frac{2}{3}$$

and

$$\frac{(240 + 60b + 60^2c) - (240 + 40b + 40^2c)}{240 + 40b + 40^2c} = \frac{1}{2}$$

Solving the above equations  $c = \frac{1}{10}$  and  $b = 10$

So, cost for producing  $x$  units =  $240 + 10x + \frac{x^2}{10}$

Profit earned from  $x$  units

$$= 30x - \left( 240 + 10x + \frac{x^2}{10} \right) = 20x - \frac{x^2}{10} - 240$$

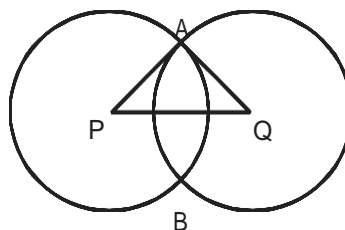
For maximum profit  $20 = \frac{2x}{10}$   
So,  $x = 100$ .

20. 4 Profit, in rupees =  $20x - \frac{x^2}{10} - 240$

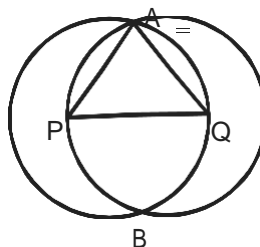
For  $x = 100$   
Profit, in rupees = 760

21. 3 Price of Darjeeling tea (in rupees per kilo gram) is  $100 + 0.10n$   
Price of Ooty tea (in rupees per kilo gram) is  $89 + 0.15n$   
Price of the Darjeeling tea on the 100<sup>th</sup> day =  $100 + 0.1 \times 100 = 110 \Rightarrow 89 + 0.15n = 110 \Rightarrow n = 140$   
Number of days in the months of January, February, March and April in the year 2007 =  $31 + 28 + 31 + 30 = 120$ .  
Therefore the price of both the tea will be equal on 20<sup>th</sup> May.

22. 3



If P and Q lie on the intersections of the circles as shown in the figure given below.



In this case triangle APQ is equilateral. So the maximum possible measure of the angle AQP is  $60^\circ$ . The answer is between 0 and 60.

23. 2 Let  $f(x) = ax^2 + bx + c$

At  $x = 1$ ,  $f(1) = a + b + c = 3$

At  $x = 0$ ,  $f(0) = c = 1$

The maximum of the function  $f(x)$  is attained at

$$x = -\frac{b}{2a} = 1 = -\frac{a-2}{2a}$$

$$\Rightarrow a = -2 \text{ and } b = 4$$

Therefore  $f(x) = -2x^2 + 4x + 1$

Therefore  $f(10) = -159$

**For questions 24 and 25:**

Using the given expressions —

$$\begin{aligned}
 a_1 &= p & b_1 &= q \\
 a_2 &= pq & b_2 &= q^2 \\
 a_3 &= p^2q & b_3 &= pq^2 \\
 a_4 &= p^2q^2 & b_4 &= pq^3 \\
 a_5 &= p^3q^2 & b_5 &= p^2q^3 \\
 a_6 &= p^3q^3 & b_6 &= p^2q^4
 \end{aligned}$$

and so on

$$\begin{aligned}
 24. 1 \quad a_n + b_n \text{ (n is even)} &= p^{\frac{n}{2}} q^{\frac{n}{2}} + p^{\frac{n}{2}-1} q^{\frac{n}{2}+1} \\
 &= q(pq)^{\frac{n-1}{2}} (p+q)
 \end{aligned}$$

$$\begin{aligned}
 25. 4 \quad a_n + b_n \text{ (n is odd)} &= p^{\frac{n+1}{2}} q^{\frac{n-1}{2}} + p^{\frac{n-1}{2}} q^{\frac{n+1}{2}} \\
 &= (p+q)(pq)^{\frac{n-1}{2}} \\
 \text{Substituting } p &= \frac{1}{3} \text{ and } q = \frac{2}{3}
 \end{aligned}$$

$$a_n + b_n = \left(\frac{2}{9}\right)^{\frac{n-1}{2}}$$

Substituting  $n = 7$ ,  $a_n + b_n > 0.01$

Substituting  $n = 9$ ,  $a_n + b_n < 0.01$

Hence smallest value of  $n$  is 9

26. 1 As the diet should contain 10% minerals and only two ingredient contains 10% minerals i.e. O and Q. Hence only by mixing O and Q a diet with 10% minerals can be formed. Hence, there is only one way.

27. 4 The required diet can be formed by mixing P and S or Q and S only but the lowest cost per unit can be achieved by Q and S only.

28. 5 To make a diet with atleast 60% carbohydrates we can use option (2) or (5) only but the lowest cost per unit can be achieved when P, Q and S are mixed in the ratio 4 : 1 : 1.

29. 5 As the ingredients are fixed in equal amounts, so we can take the average of the constituent percentage of the elements used. Only option O and S satisfies all the conditions.

30. 1 From statement A, it is clear that 40% of top academic performers are athletes and that is equal to 10. So total number of academic performers can be calculated. Statement B does not provide any relevant information. So the answer is (1).

31. 4 Statement A and B alone are not sufficient but if both are combined, then we can form the following sequence:

1	2	3	4	5
D	E	B	C	A

So the answer is (4).

32. 3 Statement A alone is sufficient because 10% of the female employees have engineering background, 70% of the employees are females, so 7% of the employees are female and having engineering background. Hence, 18% of the employees are male and having engineering background. From statement B, we know the number of male employees having engineering background. So, the percentage of male employees having engineering background can be calculated. So, the answer is (3)

33. 5 Statement A alone is not sufficient because it is not giving any information about the opponent. Statement B alone also not sufficient because it is not giving any information regarding the performance of Mahindra & Mahindra in the second half. Even if both the statements are used we will have two cases.

M & M	0	1
Opponent	3	4

So in one case match is drawn and in another case it is won by Mahindra & Mahindra. Hence the answer is (5)

**For questions 34 to 37:**

Looking at the values in the table one can easily conclude that the costs which are directly proportional to the change in volume of proportion are 'Material', 'Labour' and 'Operating cost of machines'. Rest of the costs are all fixed costs. If 'x' is the number of units produced in 2007 then the total cost of production would be

$C = 9600$  (Fixed cost) +  $100x$  (Variable cost)  
 Variable cost =  $100x$  because as the number of units for 2006 is 1200 and variable cost for that is 120000 i.e. 100 times the number of units.

34. 2 Total cost =  $9600 + 100 \times 1400 = 149600$

$$\text{Cost per unit} = \frac{149600}{1400} = 107 \text{ (approx.)}$$

35. 3 To avoid any loss the total selling price should be equal to the total cost price. If 'x' units are produced and selling price of each unit is 125 Rs.  
 Therefore,  $125x = 9600 + 100x$   
 $25x = 9600$   
 $\Rightarrow x = 384$   
 Hence, 384 units should be produced.

36. 5 Same as in question number 36 profit would be maximum if the number of units are maximum i.e. 2000

37. 1 If the company sells a maximum of 1400 units, the selling price is fixed at Rs. 125 per unit. If more than 1400 units are sold, the selling price is reduced to Rs. 120 per unit. The company cannot sell more than 1700 units.  
 To earn maximum profit at a unit selling price of Rs. 125, the company must sell 1400 units. The maximum profit earned, denoted by  $P_0$ , is calculated as below:

Profit = (Selling Price) – (Cost Price)  
 $P_0 = 125 \times 1400 - (9600 + 100 \times 1400) = \text{Rs. } 25400$

Now if the company sells an x number of units ( $x > 1400$ ) then the profit earned will be:  
 $P_x = 120 \times x - (9600 + 100 \times x) = 20 \times x - 9600$

The minimum value of x for which  $P_x$  will be more than  $P_0$  must satisfy the following inequality:

$20 \times x - 9600 > 25400$   
 $\Rightarrow x > 1750$

As only a maximum of 1700 units can be sold,  $P_x$  will never be more than  $P_0$ . Hence the maximum profit that can be earned is Rs. 25400 only.  
 Hence (1) is correct.

**For questions 38 to 41:**

From the given information the following table can be formed:

	M	F	V	NV	Total
Class 12	48	32	32	48	80
Class 11	44	36	40	40	80
Secondary Section	288	352	352	288	640
Total	380	420	424		800

38. 2 From the above table  
 Percentage of male students in the secondary section  
 $= \frac{288}{640} \times 100 = 45\%$

39. 5 From the above table  
 Male vegetarians = 8  
 Female vegetarians = 24  
 So, their difference is 16.

40. 1 Percentage of vegetarian students in Class 12 =  
 $\frac{32}{80} \times 100 = 40\%$

41. From the maintable

	M	F	V	Male Veg	Female Veg	Total
Class 12	48	32	32			80
Class 11	44	36	40			80
Secondary Section	288	352	352	320	320	640
Total	380	420	424			800

This question is wrong because the number of Male vegetarian cannot be greater than 288.

42. 3 For Malaysia, total cost  
 $= (11,000 + 6,000) + (10,000 + 8,000) + (10,000 + 8,000)$   
 $= \text{US\$ } 47,000$  (minimum)  
 Hence, the answer is Malaysia

43. 1 In India, total cost in US\$ =  $8,500 + 9,000 = 17,500$   
 which is maximum  
 Hence, the answer is India.

44. 4 In India, total cost in US\$ =  $3000 + 5000 + \frac{1500}{32.89}$   
 (transportation cost)  
 $= 8456.06$   
 In Thailand, total cost in US\$ =  $4500 + 6000 = 10,500$   
 Difference in amount is  $10,500 - 8456.06 = \text{US\$ } 2044 \approx 67,500$  Bahts

45. 2 In India, total cost for spirial fusion in US\$ =  
 $\frac{5500 \times 40.928}{35} = 6431.5$

In Singapore, total cost for spirial fusion in US\$ = 9000  
 Difference (in US\$) is  $9000 - 6431.5 = 2568.5 \approx 2500$

46. 4 For the shortest route we have to consider the path A-C-F-J.  
 Following table compiles the distance and the corresponding price.

Path	Distance	Price
A-C	790	1350
C-F	410	430
F-J	970	1150
Total	2170	2930

Hence the price for travelling by the shortest route is Rs. 2930.

47. 2 For the lowest price we have to consider the path A-H-J.  
Following table compiles the distance and the corresponding price.

Path	Distance	Price
A-H	1950	1850
H-J	400	425
<b>Total</b>	<b>2350</b>	<b>2275</b>

If the company charges 5% below the minimum price of Rs. 2275 then it should charge  $0.95 \times 2275 = \text{Rs. } 2161$

48. 3 If airports C, D and H are closed, then the passenger must follow the path A-F-J for minimum price.  
Following table compiles the distance and the corresponding price.

Path	Distance	Price
A-F	1345	1700
F-J	970	1150
<b>Total</b>	<b>2315</b>	<b>2850</b>

So the corresponding minimum price paid by a passenger is Rs. 2850.

49. 2 For minimum cost per km, we have to consider the path A-H-J  
From solution of question 47, we know the distance of path A-H-J is 2350 km and the price is Rs. 2275. The price include a margin of 10%.  
So, the minimum cost per km =  
$$2275 \times \frac{10}{11} \times \frac{1}{2350} = 0.88$$
50. 4 For minimum cost per km, again we have to consider the path A-H-J as illustrated in the solution of question 49.  
The distance of path A-H-J is 2350 km.
51. 5 'Reciprocal roles determine normative human behaviour in society'.  
This is the main idea of the passage that is carried throughout. Note that 'role of biology' is negated and 'reciprocal roles' are affirmed in paragraph 1 and 2.
52. 2 'We would not have been offended by the father playing his role 'tongue in cheek''.  
All the other options would have been false if biological linkages would have structured human society.
53. 4 The last para where the author mentions the examples of a waitress and a clergyman and a driver refers to the alignment of self with the rules being performed and society preventing manifestation of the true self.

54. 1 C and E  
In (A) 'to' is redundant.  
In (B) 'hands on about Israel'.  
In (D) a Shaliach, a sort of recruiter to Minneapolis.
55. 5 B only  
In (A) 'into' should be used in place of 'in'  
In (C) the article is missing before the word 'slump'  
In (D) the singular form 'stimulus' should be used in place of 'stimuli'  
In (E) 'effect' should be used in place of 'affect'
56. 3 B and D  
In (A) 'said' should be used instead of 'told'  
In (C) 'handed down to' should be used in place of 'handed to'  
In (E) a subject is required after 'hence'. Another way of correcting (E) is to replace 'hence' by 'but'.
57. 2 'The difference between two artistic interpretations'  
Refer the last three lines of the 1<sup>st</sup> para where the author talks about the gap between the two artistic interpretations within the depth of the creative power and doesn't mention width.
58. 1 'Define the place of the poet in his culture'.  
The lines starting with "But suddenly I understood ....."define the position of the poet in his culture.
59. 4 Refer to the 5th line of the 2nd para. Here the term "adventures of experience" refers to the poet & artists who over vitalize and enrich the past for us.
60. 5 "The personification of a whole organization is a textual device ..." is the choice which continues the theme in the last two lines of the paragraph in the best possible way. The latter half of the paragraph is talking about personification of whole organizations and this is the choice which completes the paragraph satisfactorily. The choice justifies why whole organizations are personified even though they cannot speak as characters.
61. 1 'Yet despite these technical developments..... ..care about'.  
In the first line of the paragraph the author speaks about the magical allure still retained by photographs. Then he goes on to describe the negative effects of technological advancements on the same. Thus, in line with the first idea (1) describes how photographs are still holding out against these negative effects.
62. 2 'No inventory would ever include those, ofcourse'.The para starts with listing out 'the inventory'. The option which says 'what she lacked.....natural shrewdness' is beyond the scope of the argument. All the options can be easily eliminated. 'Those' in the option 'No inventory would ever include those, ofcourse', refers to human intuition and intelligence of Mma Ramotswe.

- |   |   |
|---|---|
| <p>63. 4 'ways of understanding a scientific tradition'.<br/>The idea is implicitly throughout the passage.</p>   | <p>68. 2 BBBAB<br/>Regretfully would refer to the subject 'I'<br/>Sensual is more related to sense organs (bodily)<br/>Sensuous is aesthetically appealing to the senses.<br/>Beside oneself means overwhelmed<br/>For example: Beside oneself with grief<br/>Stationary means something that is at rest<br/>Stationery means any writing material<br/>'Over' refers to a more symbolic sense whereas<br/>'above' confirms with the idea of crossing the physical mark.</p> |
| <p>64. 3 'Loyalty to a certain paradigm of scientific inquiry'.<br/>This is an analogy question where we can draw comparison from the line that says "loci of commitment that have been described as accepted rules." Options 1 and 2 talk about a bohemical structure rather than conformity. It is 'loyalty to something' and not 'loyalty among people' talked about in the passage. Option 4 talks about adherence to an accepted norm which goes out of the scope of the argument. Option 5 talks about evolving trends which is not mentioned in the paragraph. Therefore option (3) is the best choice.</p>  | <p>69. 3 Option (3) is the most logical explanation. Refer to lines "those include ... correlations between variables"</p>  |
| <p>65. 5 From the theme and tone of the passage it can be inferred that paradigms are predominant as compared to rules. It is difficult to define rules. Paradigms in part determine normal science and also need not depend on the formulation of rules and assumptions. Hence the author would agree with the choice "Paradigms are a general representation of rules and beliefs of a scientific tradition."</p>   | <p>70. 2 'Historical outcomes depend..... each case'.<br/>Refer to the 1<sup>st</sup> para where it says "Prediction in history... became averaged out". This is further supported by the example.</p>  |
| <p>66. 4 AABBA<br/>Cricket Council is a collective noun so it takes a singular verb. The reference is made to a group as a whole and not to an individual.<br/>Censure implies harsh criticism.<br/>Censor means to put a ban on something objectionable.<br/>Credible means capable of being believed.<br/>Credulous means tending to believe without evidence.<br/>Discretely means distinct whereas discreetly means to carefully avoid social embarrassment or distress; tactful.</p>   | <p>71. 3 Note the tone with which the third paragraph starts it emphasizes that students can do much more!</p>  |
| <p>67. 5 ABABA<br/>Farther is used specifically for physical distance.<br/>Further is not used in the physical context and is used to indicate something of a greater degree or extent.<br/>Historical is something pertaining to history while historic is something significant.<br/>Distrust means having a sense of fear anticipation of discomfort of danger whereas mistrust is believing that a particular party has a hidden agenda.<br/>True means not false or not fictional while real means existing or occurring in the physical world.<br/>Compliment means a remark or an act expressing respect or admiration<br/>Complement means a person or thing that completes something</p> | <p>72. 4 ECBD<br/>EC is a mandatory pair which is linked by 'crime'. This pair is contained in options (2) and (4). D cannot follow A as 'particular piece of work' is mentioned in B. Thus D should follow B.</p>  |
|   | <p>73. 1 EDBC<br/>E must follow A as it talks about the third discourse.<br/>BC is a mandatory pair as C continues the thought that there is a need for greater expert management.</p>  |
|   | <p>74. 5 BCDE<br/>B and C explain the positive developments after 'the fall of President Soeharto and the close of his centralized, ..... In 1997'. DE is a mandatory pair as D speaks about the opinion of analysts and E speaks about another group of analysts.</p>  |
|   | <p>75. 3 CBED<br/>A talk about squatters' land. C describes who the squatters were. B follows C as it gives the description of squatters' land.<br/>E carries on the idea of what happens in the squatters' land (ripening, gathering, thrashing, collecting etc.) and finally D gives additional information about what is grown in these fields which is indicated by the word 'also'.</p>  |