NMAT FLT - 2
Answers and Explanations

1	D	**2**	C	**3**	E	**4**	D	**5**	B	**6**	D	**7**	D	**8**	C	**9**	C	**10**	A
11	D	**12**	B	**13**	A	**14**	C	**15**	C	**16**	D	**17**	D	**18**	C	**19**	B	**20**	A
21	D	**22**	C	**23**	A	**24**	E	**25**	C	**26**	B	**27**	A	**28**	D	**29**	D	**30**	A
31	C	**32**	C	**33**	C	**34**	D	**35**	E	**36**	A	**37**	E	**38**	D	**39**	B	**40**	A
41	E	**42**	A	**43**	B	**44**	E	**45**	A	**46**	E	**47**	D	**48**	B	**49**	C	**50**	D
51	A	**52**	E	**53**	C	**54**	D	**55**	B	**56**	D	**57**	C	**58**	C	**59**	A	**60**	D
61	A	**62**	D	**63**	E	**64**	D	**65**	A	**66**	A	**67**	E	**68**	A	**69**	B	**70**	E
71	B	**72**	A	**73**	B	**74**	E	**75**	B	**76**	C	**77**	C	**78**	E	**79**	D	**80**	A
81	E	**82**	C	**83**	A	**84**	D	**85**	E	**86**	B	**87**	A	**88**	D	**89**	B	**90**	A
91	A	**92**	D	**93**	A	**94**	C	**95**	A	**96**	E	**97**	C	**98**	A	**99**	C	**100**	E
101	C	**102**	D	**103**	A	**104**	C	**105**	E	**106**	A	**107**	B	**108**	C	**109**	C	**110**	A
111	B	**112**	A	**113**	D	**114**	A	**115**	E	**116**	B	**117**	E	**118**	A	**119**	E	**120**	A

1. D “Axiom” means a universally accepted principle or rule. Hence, its synonym would be “principle”.

2. C “Denigrate” means to criticize in a derogatory manner. Hence, “belittle” which means to speak of as contemptibly small or unimportant is its synonym.

3. E “Implacable” means not to be appeased or pacified. Hence, its synonym would be ‘adamant’.

4. D “Maelstrom” means a disordered or tumultuous state of affairs. Hence, “pandemonium” is its synonym.

5. B “Betroth” means to promise to marry. Hence, ‘affiance’ which means to pledge by promise of marriage is its synonym.

6. D There is direct (3) and (4) link because (4) elaborates on the point stated in (3). Similarly, (2) must follow (1) because “this” in (2) refers to the point stated in (1).

7.D As sentence (4) introduces 'a new study on cigarettes', it is obvious that (4) is the opening statement. (2) follows (4) as it mentions the view of the research team on ' the study'. (1) follows the discussion. (1) and (3) is a mandatory pair as 'these organisms' in (3) are 'the wide variety of human bacterial pathogens' discussed in (1). Thus, the logical sequence is (4), (2), (1) and (3).

8. C (3) and (1) is a mandatory pair, (3) begins to explain how our eyes and brain are related in creating a single three-dimensional image. (1) mentions that this three-dimensional image gives us depth perception. (4) presents a situation where a child (with a squint) does not have this normal vision and the process of creating the three-dimensional image gets disturbed. (2) concludes the discussion by stating the result of this abnormal alignment of eyes.

9. C The key to this question lies in identifying the mandatory pairs: (1) and (3) and (4) and (2). (1) introduces the necessity of a unique (internet) address for each computer connected to the Internet, (3) specifies the form and definition of the IP address. (4) follows the flow of information on this. (2) follows (4), as we see usage of ‘however’ in the beginning of sentence (2) presenting a contrast- an obvious difference between the two ways to connect, described in (4) and (2). Thus, (1), (3), (4), (2) is the logical sequence.

10. A B introduces the subject - state of glaciers in the Himalayas. (4) adds on by presenting the panel’s observation, ‘them’ in (4) denotes ‘Himalayan glaciers’ mentioned in (2). (3) mentions the possible consequences in the short term, and (1) mentions the possible consequences in the long term. Thus the logical sequence is (2), (4), (3), (1).

11. D There is error of comparison in the given sentence because we cannot compare “view” with the “guest house”. Hence , the correct usage would be “than that from the guest house”.

12. B “Both-and” are correlative conjunctions. Hence, after “both” the conjunction “and” should be used.

13. A When two actions occur in the past, the earlier action is indicated by the past perfect tense. Hence, the correct usage would be “had given her papers”.

14. C There is pronoun consistency error in the sentence. If the sentence begins with the pronoun “one”, then it should be followed by “oneself” and not “himself”.

15. C There is error of parallelism in the sentence. “Reading”, “writing” must be followed by “participating”.

16. D Options (A), (B),(C) and (E) are out of context. ‘Undisguised’ means unconcealed or revealed, whether the symptoms are/ become masked or revealed, it does not make the treatment/medication unessential. ‘Incomparable’ means matchless, and ‘ intemperate’ is used to describe a person (given to excessive use of intoxicating liquors) or their behaviour or speech, not controlled and too extreme or violent. Option (E) – ‘misleading’ is also not suitable for the given sentence. Only Option (D) -’unpleasant’ matches with the tone and sense of the sentence.

17. D To ‘build upon’ is to use a success or achievement as a base from which to achieve more success. Sherman used the phenomenal success of previous editions as a base to develop and update the new edition. Except option (D) all the other options are out of place.

18. C The appropriate word needed here is – ‘baton’ which means a hollow cylinder carried by each member of a relay team and passed to the succeeding runner.

19. B The blank calls for a word that has a positive connotation. We read that after the transplant, Bruce is now safe. ‘Recuperating’ is the correct word as it is specific to the sentence; to ‘recuperate’ is to regain a former state or condition; *especially* **:** to recover health or strength.

20. A The question hints at two contrasting characteristics of beavers. The word ‘despite’ suggests a word which has negative connotations as the later information given about beavers, disregards the earlier one. Also the word ‘re-introduced’ suggests of beavers being a part of the British countryside until they were found unfavourable (as in the first sentence, we read ‘beavers are considered notorious’). Option (B)- ‘ ignominy’ which means public embarrassment; deep personal humiliation, is out of context. Option (C) and (E)- ‘innocence’ and “righteousness” contradict the

tone of the sentence. Option (D) is incorrect, as 'wickedness' of beavers is nowhere hinted in the given sentence. Option (A)- 'notoriety' which means the state of being known for something bad or *notorious; ill-fame, suits the blank appropriately.*

21. D The passage traces the definition of pure art as per Kant's theory. (A) is not correct because Kant actually believed in it. (B) is also attributed to Kant in the passage. (C) and (E) are also a part of his theory. (D) is the correct answer because according to Kant it involved free play and was thus pure.

22. C According to the passage, Kant equates appreciation of beauty with scattered pebbles, unfettered and at the same time harmonious, making (C) the correct answer. All the other options vest the pebbles with some quality which makes them incorrect. (A) vests it with free play, (B) as representing beauty, (D) inner beauty and (E) a harmonious element.

23. A The passage marks the advent and spread of Aesthetics and presents Kant's views on pure enjoyment of nature and why he thought arts to be impure. The passage traces Kant's argument for appreciation of pure beauty, this being the main line of thought hence it makes (A) correct. (B) is incorrect as there is no occurrence of any sorts, so is C, as there is no conjecture. (D) and (E) are on the same lines and are incorrect as the passage concentrates on Kant's line of thought only.

24. E The author employs reasoning to define Kant's line of thought for us. (A) is incorrect as the tone is quite objective, (B) is incorrect as there is no maligning and (C) is incorrect as the passage seeks to merely inform, (D) is also incorrect as there is a degree of logic employed to convey the full essence of Kant's thought process, making (E) the correct answer choice.

25. C The passage is quite clearly about Kant's theory of pure beauty; the passage gradually veers towards this. All the other options are incorrect as in (A) we talk about search of beauty which is not correct, (B) is incorrect because it is more of pure beauty, (D) is again incorrect because it's an aspect being discussed and (E) is not discussed at all.

26. B 'Cognition' quite literally means to obtain knowledge through experience and senses and in the last paragraph it is used for the experience with the pebbles making option (B) correct. (A) is only partial and the passage does not talk about awareness through knowledge, (C) is also not referred to making it incorrect. (D) and (E) are also discussing something which is not mentioned in the passage and are thus incorrect.

27. A The passage discusses the limit of the use of literature by the Marxists, making option (A) correct. Option (B) is incorrect because it is contradictory to the theory, (C), (D) and (E) represent some causes that are close to the Marxists.

28. D The lines "In keeping with the totalizing spirit of Marxism… cultural production as well," make (D) correct. (A) talks about the themes of literature, (B) also discusses the aspect, (C) is not mentioned in this context, (E) is also not mentioned in this context.

29. D The correct answer choice is (D), it means "To do something that has not been done before", and in the context of the passage it is most relevant, (A) is incorrect as it actually means common ground, (B) is incorrect, the phrase for this is to 'get something off the ground', (C) stands for 'into the ground' and (E) actually is a phrase that says to 'suit someone down to the ground'.

30. A The passage talks about the repression by the capitalists and mass cultural forms like jazz, films etc. which served as the tools, this was possible because it had a sensory quality which suppressed reflection and (A) puts this across. (B), (D) & (E) are false and nowhere stated in the passage and hence are incorrect.

31. C The passage is mainly concerned with establishing Marxist influence on literature. The last paragraph reiterates the major Marxist influences on literary theory making (C) correct. (A) states the opposite and hence is incorrect, (B) is also not stated in the passage, (D) is also redundant and (E) is false.

32. C (A) and (B) are not stated in the passage, (C) is the best answer as is supported by the last paragraph of the passage. The boundaries dividing Marxism and capitalism are broken and are part of the mainstream Thus, (C) is the best answer. (D) is weak and (E) is very vehement.

33. C L.C.M of 3, 4, 5 and 6 = 60
The smallest 3-digit number which when divided by 3, 4, 5 and 6 leaves the remainder 2, 3, 4 and 5
= (60)(2) – 1 = 119
Hence, option (C) is the correct choice.

34. D We can write bbb = b × 37 × 3
Now b= 2, since 2 is the smallest prime number
Now, number of odd factor = 2 × 2 = 4
Hence, option (D) is the correct choice.

35. E The remainders when 445,460, 475 and 490 are divided by 33 are 16, 31,13 and 28.
The net product of the remainders = 16 × 31 × 13 × 28
= 16 × (– 2) × 13 × (– 5) = 2080
The number 2080 when divided by 33 leaves the remainder 1.
Hence, option (E) is the correct choice.

36. A Let the side of the equilateral triangle ABC be 'a' unit. The radius of the circle (C2) inscribed in the triangle ABC = $\left(\frac{a}{2}\right)\tan 30° = \frac{a}{2\sqrt{3}}$

The radius of the circle (C1) circumscribing the triangle ABC = $\frac{a}{\sqrt{3}}$

The required ratio = $\frac{\left(\frac{a}{\sqrt{3}}\right)}{\frac{a}{2\sqrt{3}}} = 2 : 1$

Hence, option (A) is the correct choice.

37. E We cannot find the area of the trapezium ABCD since we can draw as many trapeziums as possible.
Hence, option (E) is the correct choice.

38. D Keeping breadth as the base, we can write

$2 \times \frac{22}{7} \times r = 10 \Rightarrow r = \frac{70}{44}$

Volume of the cylinder

$= \pi r^2 h = \left(\frac{22}{7}\right) \times \frac{70}{44} \times \frac{70}{44} \times 50 = 397 \text{ cm}^3$

Hence, option (D) is the correct choice.

39. B Total cost of painting the cone A = Rs. T
Here, 'l' is the slant height of the cone A, where $l^2 = r^2 + h^2$

Surface area of cone A = $\pi r\sqrt{r^2 + h^2}$

The slant height of cone B = $\sqrt{\frac{r^2}{4} + \frac{h^2}{4}} = \frac{\sqrt{\left(r^2 + h^2\right)}}{2}$

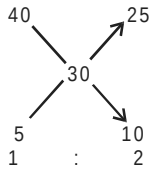
Surface area of cone B = $\frac{\pi r\sqrt{r^2 + h^2}}{4}$

Therefore, total cost of painting of cone B $= \frac{T}{4}$

Hence, option (B) is the correct choice.

40. A According to the question, we have
$10 \times 60 \times 9 = m \times 30 \times 5$
$\Rightarrow m = 36$
Therefore, additional men required = 36 – 10 = 26 men
Hence, option (A) is the correct choice.

41. E Applying alligation, we have



Therefore, the required ratio = 1:2.
Hence, option (E) is the correct choice

42. A Given that $\left(4\frac{1}{2} \div \frac{3}{7} \times \frac{3}{2} + 1\right) - \left[3\frac{7}{4} - (2 + 3(4-1))\right]$

$= \left(\frac{21}{2} \times \frac{3}{2} + 1\right) - \left[\frac{19}{4} - 11\right]$

$= \frac{67}{4} + \frac{25}{4} = 23$

Hence, option (A) is the correct choice.

43. B $\frac{1^3 + 2^3 + 3^3 + \ldots + n^3}{1^2 + 2^2 + 3^2 + \ldots + n^2} = \frac{\left[\frac{n(n+1)}{2}\right]^2}{\frac{n(n+1)(2n+1)}{6}}$

$= \frac{3n(n+1)}{2(2n+1)} = \frac{3 \times 10 \times 11}{2 \times (2 \times 10 + 1)} = \frac{55}{7}$

Hence, option (B) is the correct choice.

44. E $\frac{2^2\left(1 + 3\frac{1}{2}\right) + 2\left(3 - \frac{1}{3} + \frac{1}{3^2}\right)}{\left(5^2 - 4^2\right)\left(4^2 - 3^2\right)} = \frac{18 + 2\left(3 - \frac{2}{9}\right)}{9 \times 7}$

$= \frac{18 + \frac{50}{9}}{63} = \frac{186}{9 \times 63} = \frac{212}{567}$

Hence, option (E) is the correct choice.

45. A $22 \times \frac{1}{6}$ of $18 = 22 \times 3 = 66$ ...(i)

$154 \div \overline{(2 \times 7) - 1 \times 3} = 154 \div \overline{14 - 3}$
$= 154 \div 11 = 14$ ...(ii)

Now, from (i) and (ii) –

$\frac{66}{14}$ – 15% of '?' = 1

or 15% of '?' $= \frac{66}{14} - 1 = \frac{52}{14}$

or $\frac{(15 \times \text{'?'})}{100} = \frac{52}{14}$

or '?' = 24.76

46. E Numerator $= \sqrt{8} \times \sqrt{32} \times \sqrt{20}$

$= 2\sqrt{2} \times 4\sqrt{2} \times 2\sqrt{5} = 32\sqrt{5}$

Denominator $= \sqrt{3} \times \sqrt{5} \times \sqrt{21} = 3\sqrt{5} \times \sqrt{7}$

Numerator/Denominator $= \dfrac{32}{3\sqrt{7}}$

$= \dfrac{(32 \times \sqrt{7})}{21} = \dfrac{(32 \times 2.65)}{21} = 4.0$ (approximately)

47. D $\overline{4 \div 5} \div 4 = \dfrac{1}{5}$

$1 \div \dfrac{1}{5} = 5$

5 + 3 = 8
Also, 25% of 16 = 4
So the expression reduces to -
1 × 2 + [– 3 + 8 – 4]
= 2 + 1
= 3

48. B For Simple Interest -

$2 \times \left(\dfrac{x}{100}\right) \times 800 = 320$

$x = \dfrac{320}{16} = 20$

Interest earned at 20% compound interest rate after 2 years on principle amount Rs. 1000 -

$= \dfrac{20}{100} \times 1000 + \dfrac{20}{100}\left(1000 + \dfrac{20}{100} \times 1000\right)$

= 200 + 240 = Rs. 440

49. C Let the cost price of each apple be Rs. C
Let the number of apples he sold at 20% profit = x
So profit = 0.2Cx
Let the number of apples he sold at 35% loss = y
So loss = 0.35Cy
Now,
0.2Cx = 0.35Cy
or 4x = 7y
or x = 7y/4
Minimum possible value of x + y such that both x and y are integers = 7 + 4 = 11

50. D Let the side of Metal cube = 2 unit
Surface area = 24 unit square
It's cost = 24K where 'K' is any constant.
Side of each Metal cube (after cutting) = 1unit
Surface area = 48 unit square
Cost = 48k

$\%\ \text{profit} = \dfrac{(48 - 24)}{24} \times 100 = 100\%$

51. A Let Mohit starts his walk at T = 0 sec.

Mohit meets Rohit at time $T_1 = \dfrac{100}{(2 + 4)} = 16.67$ secs.

Mohit reaches B at time $T_2 = \dfrac{100}{2} = 50$ secs.

Time taken by Mohit to reach B after he has crossed Rohit = $T_2 - T_1$ = 33.33 seconds

52. E Let the speed of stream be S m/s
So, speed of boat in still water = 3S m/s

Time taken when travelling downstream $= \dfrac{AB}{4S}$

Time taken when travelling upstream $= \dfrac{AB}{2S}$

$\dfrac{AB}{2S} - \dfrac{AB}{4S} = \dfrac{AB}{4S} = 10 \times 60 = 600$

or $4S = \dfrac{AB}{600} = \dfrac{3000}{600} = 5$

or S = 1.25 m/s

53. C If 'S' cannot occupy the first or the last place then it has only five places available. The place where S now can be placed can be selected in ${}^5C_1 = 5$ ways. The rest 6 letters 'W, I, M, M, E and R' can be arranged in $\dfrac{6!}{2!}$ ways. Total ways $= \dfrac{5.6!}{2}$.

54. D Number of people who can speak English
= 40% of 200 = 80
Number of people who can speak Hindi
= 80% of 200 = 160
Number of people who can speak both the languages
= 80 + 160 – 200 = 40
Number of people who can speak only one language
= 200 – 40 = 160
Number of males who can speak both the languages

$= \dfrac{3}{(3 + 7)} \times 40 = 12$

Number of males who can speak only one language

$= \dfrac{7}{(3 + 7)} \times 160 = 112$

Total males in the town = 124.

55. B Let initial fraction of A be x
Initial amount of A = 1000x ml
Amount of A after removal of 100ml of mixture
= 900x (as now 900 ml of mixture is left)
Amount of A after addition of 100ml of A = 900x + 100

Fraction of A $= \dfrac{900x + 100}{1000} = 1.1x$

(due to the rise of 10 percent)
$900x + 100 = 1100x$

$200x = 100$ or $x = \frac{1}{2} = 50\%$

Final fraction of A will be 55%
Final amount of B = 45% of 1000 = 450 ml

56. D Let the present age of Ram be x years
Let the present age of Rahim be y years
Age of Ram after 5 years = x + 5
Age of Rahim after 5 years = y + 5

So, $\frac{x}{y} = \frac{4}{5}$ and $\frac{(y+5)}{(x+5)} = \frac{6}{5}$

Solving the above two equations -
x = 20 and y = 25
So Rahim's age after 10 years will be 25 + 10 = 35 years

57. C **Using statement I:**
we can infer that B – R = 7, where B and R are the speeds of boat in still water and river respectively. But this information is not sufficient to find out the speed of the boat in still water. Hence, we cannot answer using statement I alone.

Using statement II:
we infer that 7 = D/(B + R) where D is the distance covered by the boat. Again we cannot answer the question using this information. Hence, statement II is not sufficient to answer the question.

Combining II and I:
we get B + R = 5 and B – R = 7. Solving these equations we can find out the speed of the boat in still water.

Hence, option (C) is the correct choice.

58. C Combining both the statements, we get B : G = 2 : 1 and B – G = 8, where B and G are the number of boys and girls respectively. Using these two equations we can find the value of B and G separately and hence find out the number of students in the class which is B + G
Hence, option (C) is the correct choice.

59. A **Using statement I**

Amount of profit earned $= 1740 - \frac{1740}{1.2} = \text{Rs.}290.$

Therefore, statement I alone is sufficient to answer the question.

Using statement II:
we cannot answer the question and therefore it is not sufficient to answer the question.
Hence, option (A) is the correct choice.

60. D **Using statement I:**

$800 = \frac{(P \times R \times 12)}{100}$ ...(i)

$2P = \frac{(P \times R \times 5)}{100}$ ...(ii)

Using these equations, we can find out the value of sum. Therefore, statement I alone is sufficient to answer the question.

Using statement II:

$\frac{P + 2PR}{100} = 305$ ...(iii)

$\frac{P + 5PR}{100} = 575$ ...(iv)

Again using these, equations we can find out the value of 'P'. Therefore, statement II alone is sufficient to answer the question.
Hence, option (D) is the correct choice.

61. A **Using statement I:**
we can say that if a number 'k' is not divisible by 3,it will also be not divisible by 18.Therefore, statement I alone is sufficient to answer the question.
We cannot answer the question using statement II.
Hence, option (A) is the correct choice.

62. D Production of Filter 6 in 2005-06

$= \frac{534}{1.2} = 445$ thousand tonnes.

Hence, option (D) is the correct choice.

63. E Production of Filter 1 in 2007-08

$= \left(\frac{100 + 16\left(\frac{2}{3}\right)}{100}\right) \times 72.2 = 84.23$ thousand tonnes.

Hence option (E) is the correct choice.

64. D Filter 6 has the minimum percentage variation between the target and the actual of 2006-07, which is

$\frac{9}{525} \times 100 = 1.7\%.$

Hence, option (D) is the correct choice.

65. A The actual production of Filter 7 in 2005-06

$= \frac{225}{(1 - 0.12)} = 255$ thousand tonnes

Hence, option (A) is the correct choice.

66. A Total production
For 2007-08 = 280 + 56 = 336 thousand tonnes

For 2005-06 = $\frac{280}{1.32}$ = 212.12 thousand tonnes

Average annual growth rate of filter 5 production for the two years = $\frac{336-212.12}{212.12\times 2}\times 100 = 29.2\%$

67. E If B receives 'x' amount of water then it uses '$\frac{x}{3}$' amount and supplies the rest '$\frac{2x}{3}$' amount of water to D and E. So the amount of water supplied by B = twice the water used by B.
The same is true in case of C
Amount of water received by
D = E = F = G = 150 million gallons
Amount of water supplied by
B = Amount of water supplied by C = 300 million gallons
Amount of water used by B = Amount of water used by C = $\frac{300}{2}$ = 150 million gallons

Total amount of water supplied by A = 300 + 300 + 150 + 150 = 900
The day must be Friday.

68. A If B receives 'x' amount of water then it uses '$\frac{x}{3}$' amount and supplies the rest '$\frac{2x}{3}$' amount of water to D and E.
So the amount of water supplied by B = twice the water used by B.
The same is true in case of C.
Let the amount of water received by D=y million gallons
So, amount of water received by E, F and G must be 4y, 3y and 2y (all in million gallons)
total amount of water supplied by B = amount of water received by D and E = (1+4)y = 5y

total water used by B = $\frac{5y}{2}$

total amount of water supplied by C = amount of water received by F and G = (3+2)y = 5y

total water used by C = $\frac{5y}{2}$

Ratio = $\frac{5y}{2} : \frac{5y}{2}$ = 1 : 1

69. B Since the amount of water received by B and C was equal, they must have received 350 million gallons of water each.

Amount of water received used by B = $\frac{350}{3}$ = 116.67 million gallons

Amount of water supplied to D and E = $\left(\frac{2}{3}\right)350$

= 233.33 million gallons
Amount of water received by D = 100 million gallons (given)
Amount of water received by E = 133.33 million gallons
Ratio = 100 : 133.33 = 3 : 4

70. E From the amount of water received by D and F we cannot conclude the amount of water supplied to E and G. So total amount of water supplied by B and C cannot be determined. Subsequently we cannot determine the amount of water received by B and C.

71. B If B receives 'x' amount of water then it uses '$\frac{x}{3}$' amount and supplies the rest '$\frac{2x}{3}$' amount of water to D and E. So the amount of water supplied by B = twice the water used by B.
The same is true in case of C.
The amount of water supplied by A on Thursday = 600 million gallons. (given)

Amount of water received by C = $\frac{3(600)}{(1+3)}$

= 450 million gallons
Amount of water used by C = 150 million gallons (one-third of 450)
Amount of water supplied to F and G = 450 – 150 = 300 million gallons

Amount of water received by F = $\left(\frac{2}{3}\right)300$

= 200 million gallons

72. A All the numbers are divisible by 3 except 320.
Hence, option (A) is the correct choice.

73. B All the numbers leave a remainder of 1 when divided by 6 except 38.
Hence, option (B) is the correct choice.

74. E All numbers follow the pattern $n^3 + 1$ except 17 where n is a natural number.
Hence, option (E) is the correct choice.

75. B All numbers are multiple of 11 except 131.
Hence, option (B) is the correct choice.

76. C Total production of B in 2006 = 25 % of 660
= 165 million tonnes
Total production of B in 2004 = 15 % of 570
= 85.50 million tonnes
Difference = 79.50 million tonnes

77. C Total production for LC India Ltd. In 2006
= 660 million tonnes
Total production for LC India Ltd. in 2004
= 570 million tonnes

Percentage increase = $\frac{90}{570}$ = 15.8 % approximately

78. E Total production of D in 2005 = 15 % of 700
= 105 million tonnes
Total production of D in 2004 = 25 % of 570
= 142.50 million tonnes
Absolute difference = 37.50 million tonnes

79. D Total production in 2005 = 700 million tonnes
Total production in 2006 = 660 million tonnes

Production of A in 2005 = 25% of 700
= 175 million tonnes
Production of A in 2006 = 30% of 660
= 198 million tonnes

Production of B in 2005 = 20% of 700
= 140 million tonnes
Production of B in 2006 = 25% of 660
= 165 million tonnes

Production of C in 2005 = 40% of 700
= 280 million tonnes
Production of C in 2006 = 20% of 660
= 132 million tonnes

Production of D in 2005 = 15% of 700
= 105 million tonnes
Production of D in 2006 = 25% of 660
= 165 million tonnes

So, products A, B and D saw an increase in the production during the period 2005-06.

80. A Total production in 2006 = 660 million tonnes
Production of D in 2006 = 25% of 660
= 165 million tonnes
20% of 165 = 33 million tonnes of D was found to be malfunctioning
Answer = 165 – 33 = 132 million tonnes

81. E Every step involves the arrangement of one word in alphabetical order. So, following the same rule we get the output as
Output: and distortion fallacy generates interest Lack of
This output is obtained in the Vth step. Hence, option (A) is the correct choice.

82. C The required output = Iam man my of own principles the.
Hence, option (C) is the correct choice.

83. A The Vth step will give the output as follows.
a being is of perception Sincerity wise
Hence, option (A) is the correct choice.

84. D The required output = darkness prevail stops sun the to under.
Hence, option (D) is the correct choice.

85. E The third step will be = an Digestion integral is metabolism part of the.
Hence, option (E) is the correct choice.

86. B From statement (ii) and (vii), we can easily conclude that B is intelligent in Philosophy, Arithmetic, and Geology.
Hence, option (B) is the correct choice.

87. A From statement (i) and rest of the other statements, we can easily conclude that A is intelligent in Philosophy and Reasoning but not in Geology
Hence, option (A) is the correct choice.

88. D From statement (v) and (vii), we can easily conclude that D is intelligent in Arithmetic, Geology and Science
Hence, option (D) is the correct choice.

For questions 89 to 91:
Bimal, the mother of Anil, got more points than her husband. So, we have Bimal > Bimal's husband. Also Anil's father who is Bimal's husband, got more points than Farosh. So we have Bimal > Bimal's husband > Farosh.

Similarly we can conclude that Farosh > Dharma > Elle. Since Anil is the niece and got the lowest, therefore we get the final order as follows.

Bimal > Chand > Farosh > Dharma > Elle > Anil

89. B

90. A

91. A

92. D Resultant of row 1 = 22 + 10 $\Rightarrow$ 32 $\Rightarrow$ 32 × 3 = 96
Resultant of row 2 = 10 × 13 $\Rightarrow$ 130 $\Rightarrow$ 130 + 6 = 136
The required difference = 40
Hence, option (D) is the correct choice.

93. A Resultant of row 1 = 32 × 11 $\Rightarrow$ 352 $\Rightarrow$ 352 × 5 = 1760
Resultant of row 2 = 20 × 13 $\Rightarrow$ 260 $\Rightarrow$ 260 + 4 = 264
The required product = 1760 × 264 = 464640
Hence, option (A) is the correct choice.

94. C Resultant of row 1 = $120 \div 15 \Rightarrow 8 \Rightarrow 8 \times 3 = 24$
Resultant of row 2 = $17 - 14 \Rightarrow 3 \Rightarrow 3 - 2 = 1$
The required difference = 24 - 1 = 23
Hence, option (C) is the correct choice.

95. D **Option A :**

$$\frac{\{1 @ 2\}}{\{2 \$ 1\}} = \frac{\left(\frac{2}{3}\right)}{\left(\frac{1}{3}\right)} = 2$$

Option B :

$$\{1 @ \{2 \$ 2\}\} = 1 @ \left(\frac{1}{4}\right) = \frac{1}{5}$$

Option C :

$$\{2 \$ 3\} @ \{1 \$ 3\} = \left\{\frac{1}{5}\right\} @ \left\{\frac{1}{4}\right\} = \frac{1}{9}$$

Option D :

$$\{1 @ 2\} \$ \{1 @ 3\} = \left\{\frac{2}{3}\right\} \$ \left\{\frac{3}{4}\right\} = \frac{12}{17}$$

Hence this option does not give a correct equation
Option E :

$$\{2 \$ \{4 @ 1\}\} = \left\{2 \$ \left(\frac{4}{5}\right)\right\} = \frac{5}{14}$$

96. E $\frac{1}{4} \# \frac{1}{6} = 4 + 6 = 10$

$10 @ 50 = \frac{500}{60} = 8.33$

$5 \& 4 = \frac{(5+4)}{(5-4)} = 9$

$10 @ 1 = \frac{10}{11} = 0.91$

$\frac{1}{60} \$ \frac{1}{13} = \frac{780}{73} = 10.68$

The absolute value of the fifth expression is the maximum among the five.

97. C $4 \& 5 = -9$

$3 \$ (-9) = -\frac{1}{6}$

$2 \# (-1/6) = -\frac{11}{2}$

$1 @ (-11/2) = \frac{11}{9}$

$k = \frac{11}{9}$

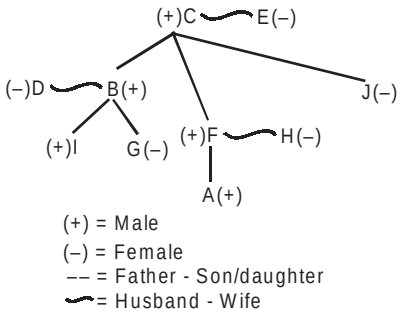
$1 < \frac{11}{9} < 2$ or $1 < k < 2$

98. A T is the 20th alphabet and there are a total of 26 alphabets.
So, T $\rightarrow$ 20. F $\rightarrow$ 6 = 26 – 20,
H $\rightarrow$ 8. R $\rightarrow$ 18 = 26 – 8 and so on
For MASTER
M = 13 will be coded as M (26 – 13 = 13)
A = 1 will be coded as Y (26 – 1 = 25)
S = 19 will be coded as G (26 – 19 = 7)
T = 20 will be coded as F (26 – 20 = 6)
E = 5 will be coded as U (26 – 5 = 21)
R = 18 will be coded as H (26 – 18 = 8)
MASTER will be coded as MYGFUH

99. C ARTHUR is coded as BJNPPL
A $\rightarrow$ 1 and 2 × 1 = 2 $\rightarrow$ B
R $\rightarrow$ 18 and 2 × 18 = 36 $\rightarrow$ 36 – 26 = 10 $\rightarrow$ J
T $\rightarrow$ 20 and 2 × 20 = 40 $\rightarrow$ 40 – 26 = 14 $\rightarrow$ N
H $\rightarrow$ 8 and 2 × 8 = 16 $\rightarrow$ P
U $\rightarrow$ 21 and 2 × 21 = 42 $\rightarrow$ 42 – 26 = 16 $\rightarrow$ P
R $\rightarrow$ 18 and 2 × 18 = 36 $\rightarrow$ 36 – 26 = 10 $\rightarrow$ J
Hence, ARTHUR $\rightarrow$ BJNPPL
BUISY will be coded as –
B $\rightarrow$ 2 and 2 × 2 = 4 $\rightarrow$ D
U $\rightarrow$ 21 and 2 × 21 = 42 $\rightarrow$ 42 – 26 = 16 $\rightarrow$ P
I $\rightarrow$ 9 and 2 × 9 = 18 $\rightarrow$ R
S $\rightarrow$ 19 and 2 × 19 = 38 $\rightarrow$ 38 – 26 = 12 $\rightarrow$ L
Y $\rightarrow$ 25 and 2 × 25 = 50 $\rightarrow$ 50 – 26 = 24 $\rightarrow$ X
Hence, BUISY $\rightarrow$ DPRLX

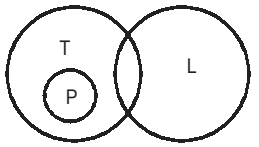
100. E In case of BRYTER,
B $\rightarrow$ 2
R $\rightarrow$ 18 and 1 + 8 = 9
Y $\rightarrow$ 25 and 2 + 5 = 7
T $\rightarrow$ 20 and 2 + 0 = 2
E $\rightarrow$ 5
R $\rightarrow$ 18 and 1 + 8 = 9
So, BRYTER $\rightarrow$ 297259
Similarly, in case of ENRIQUE –
E $\rightarrow$ 5
N $\rightarrow$ 14 and 1 + 4 = 5
R $\rightarrow$ 18 and 1 + 8 = 9
I $\rightarrow$ 9
Q $\rightarrow$ 17 and 1 + 7 = 8
U $\rightarrow$ 21 and 2 + 1 = 3
E $\rightarrow$ 5
So, ENRIQUE $\rightarrow$ 5599835

For questions 101 to 105:

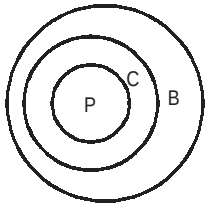


101. C 102. D 103. A 104. C 105. E

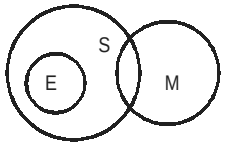
106. A Only I can be concluded from the diagram. II is not necessarily true.



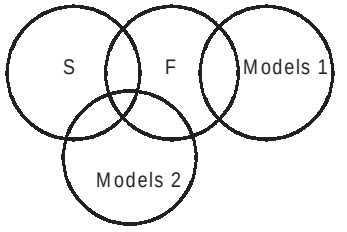
107. B The diagram shows that only II can be concluded. I does not hold true.



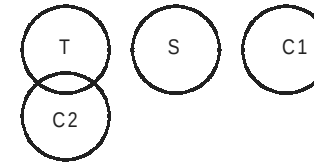
108. C Both the conclusions follow as shown in the given diagram.



109. C Both the conclusions follow. Refer to the diagram given below.



110. A Only conclusion I follows. II can never be true.



111. B Here statement II is the cause that is "children getting wrong influence by watching certain movies" because of which statement I occurs that is "the government orders a ban".

112. A Here statement I is the cause that is "the cold chilly mornings in Delhi" because of which statement II occurs that is "the schools get closed".

113. D Both I and II are effects of independent causes that is "economic recession" and "the rising market prices".

114. A Here again statement I is the cause that is "the probable terrorist attacks during festival seasons" because of statement II occurs as the effect which is "security system gets tightened".

115. E Both statements I and II are effects of some common cause that is "the construction work of metro going on in Delhi and Bangalore".

116. B The inference is probably true as can be traced from the sentence, "Although we may think.....those thoughts could be farther from the truth."

117. E The data given in the paragraph is inadequate to define the inference.

118. A The inference is definitely true as can be traced from the sentence, "Our perceptions are filtered through ears.....less sensitive than a lizard's skin."

119. E The data given in the paragraph is inadequate to define the inference.

120. A The inference is definitely true as can be traced from the lines, "Although you may think that your senses.....do not work in real time."