

Quantitative Analysis

1. (b) By option 9- $40 \times 5 = 200$

$$25 \times 4 = \frac{100}{100}$$

2. (a) $30 \frac{100 \times 300}{30} = 1000$

3. (d) $2430 - 30(5 + 10 + 15)$
 $2400 \times \frac{4}{12} = 800 + 10 = 810$

4. (c) $CP = \frac{896 + 524}{2} = \text{Rs. } 710$ @ 50% profit $SP = 1065$

5. (b) We have $A:B:C = (20 \times 7):(22 \times 5):(25 \times 6) = 14:11:15$
C's share $\Rightarrow \frac{15}{40} \times 360 \Rightarrow 135$

6. Solve by option (a) 250, 225

7. (b) $12x \times 12y = 3600$ $x \times y = 25 = 1$

8. (b) 2

9. (a) $5 + 9 + 4 = 4$

10. (b) $\frac{1}{6}$ th A = $\frac{1}{4}$ th B = $\frac{2}{5}$ th C $\Rightarrow 6:4:2.5 \Rightarrow 12:8:5 = 1080$

11. (b) $\frac{19-15}{15-9} = \frac{4}{6} = \frac{2}{3} = 3:2$

12. (a) $\frac{5x+6}{30-y} = \frac{6}{4y+6} = \frac{x}{5}$ $x = 6$
 $\frac{24-y}{24-y} = \frac{7}{7}$

$210 - 7y = 216 - 9y$

$2y = 6$ $y = 3$

13. (a) $\frac{1}{10} + \frac{1}{20} + \frac{1}{x} = \frac{1}{5} \Rightarrow \frac{1}{x} = \frac{1}{5} - \frac{1}{10} - \frac{1}{20} \Rightarrow \frac{1}{x} = \frac{4-2-1}{20}$
 $\Rightarrow x = 20$ days

14. (c) $2 \text{ m} \frac{2960}{60 \times 2960}$
 $60 \frac{2960}{2 \times 1000} = 88.8 \text{ km}$

15. (b) $\frac{2+1}{60} = S \Rightarrow S = 45 \text{ km/hr}$

Data Interpretation

(Q 16 - 19)

16. (c) Protein content in each of the given diets are :

(i) In 400 gm. of P and 150 gm. of Q : Protein = (10% of 400 + 30% of 150) gm. = (40 + 45) gm. = 85 gm.

(ii) In 300 gm. of P and 100 gm. of R : Protein = (10% of 300 + 40% of 100) gm. = (30 + 40) gm. = 70 gm.

(iii) In 250 gm. of R : Protein (40% of 250) gm. = 100 gm. which is more than the required content.

(iv) In 800 gm. of P : Protein = (10% of 800) gm. = 80 gm.



17.(d) Fat content in the given diets are as calculated below :

- (i) In 450 gm. of P and 200 gm. of R : Fat = (15% of 450 + 10% of 200) gm. = (67.5 + 20) gm. = 87.5 gm.
 (ii) In 400 gm. of Q and 300 gm. of R : Fat = (20% of 400 + 10% of 300) gm. = (80 + 30) gm. = 110 gm.
 (iii) In 200 gm. of Q and 675 gm. of R : Fat = (20% of 200 + 10% of 675) gm. = (40 + 67.5) gm. = 107.5 gm.
 (iv) In 350 gm. of P and 300 gm. of Q : Fat = (15% of 350 + 20% of 300) gm. = (52.5 + 60) gm. = 112.5 gm.

18.(b) From the table it is clear that the costs per 10 grams of foods P, Q and R are Rs. 1.80, Rs. 1.08 and Rs. 1.65 respectively. Therefore, the costs of the given diets are as calculated below :

- (i) 600 gm. of P and 400 gm. of Q : Cost = Rs. (60 x 1.80 + 40 x 1.08) = Rs. (108 + 43.2) = Rs. 151.20.
 (ii) 750 gm. of Q and 250 gm. of R : Cost = Rs. (75 x 1.08 + 25 x 1.65) = Rs. (81 + 41.25) = Rs. 122.25.
 (iii) 450 gm. of P and 550 gm. of R : Cost = Rs. (45 x 1.80 + 55 x 1.65) = Rs. (81 + 90.75) = Rs. 171.75.
 (iv) 850 gm. of P and 150 gm. of Q : Cost = Rs. (85 x 1.80 + 15 x 1.08) = Rs. (153 + 16.2) = Rs. 169.20.

Clearly, the lowest cost is for the diet - 750 gm. of Q and 250 gm. of R.

19. (d): As given in the table, it is clear that the cost per gram of foods P, Q and R are Rs. 0.180, Rs. 0.108 and Rs. 0.165 respectively. Cost of x gm. of P, y gm. of Q and z gm. of R together = Rs. (0.180x + 0.108y + 0.165z)

$$= \text{Rs.} \left[\frac{180}{1000}x + \frac{108}{1000}y + \frac{165}{1000}z \right] = \text{Rs.} \left[\frac{1}{5} \left(\frac{180}{200}x \right) + \frac{1}{5} \left(\frac{108}{200}y \right) + \frac{1}{2} \left(\frac{165}{500}z \right) \right] = \text{Rs.} \left[\frac{1}{5} \left(\frac{90}{100}x \right) + \frac{1}{5} \left(\frac{54}{100}y \right) + \frac{1}{2} \left(\frac{33}{100}z \right) \right]$$

$$= \text{Rs.} \left[\frac{0.9}{5}x + \frac{0.54}{5}y + \frac{0.33}{2}z \right]$$

(Q 20 – 27)

20. (d) Cost of engine = 30% of 1,00,000 = 30,000

21. (c) Cost of gear box = $20 \times \frac{100000}{100} \times \frac{15}{100} = 3000$

22. (b) Cost of brake = $\frac{20 \times 100000}{100} \times \frac{30}{100} = 6000$

Required % = $\frac{6000}{100000 - 10000} \times 100 = 6.6\%$

23. (a) Price of tyres = $\frac{20 \times 100000}{100} \times \frac{15}{100} = 3000$

Increased price of tyres = $3000 \times \frac{125}{100} = 3750$

Price should be increased = 3750 - 3000 = Rs. 750

24. (b) Increased transmission cost = $20000 \times \frac{120}{100} = 24000$

Increased in transmission cost = 24000 - 20000 = Rs. 4000

25. (c) Margin = 10% % profit = $\frac{10}{90} \times 100 = 11.11\%$

26. (a) Price of clutch = 30% of 20000 = 6000

Required % = $\frac{6000}{100000} \times 100 = 6\%$

27. (b) Increased engine cost = $30000 \times \frac{20}{100} = \text{Rs. } 6000$

Increased transmission cost = $20000 \times \frac{10}{100} = \text{Rs. } 2000$

New cost = 90000 + 8000 = 98000

Required % = $\frac{22000}{98000} \times 100 = 22.44\%$

Logical Reasoning

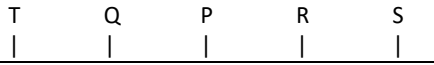
Directions (Q. 28-29) : Correct position of eight friends have been shown in the figure



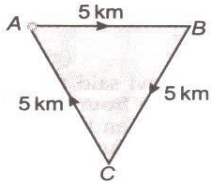
28. (e) On the basis of given information and figure, all the alternatives are correct.

29. (a) Usha is third to the left of Sagar.

Directions (Q. 30-33) : Figure shows the correct position of five persons sitting in a row.



30. (a) P is sitting between Q and R.
 31. (a) P is sitting at the centre of the row.
 32. (d) Q is sitting second from the left.
 33. (b) S is sitting at the extreme right of the bench.
 34. (a) Following the instructions as given in the questions, it is seen that finishing point and end point are the same.



35. (b) Letters at odd places in the coded word are one letter ahead of the letters in the basic word, and letters at even places are one letter behind of the letters in the basic word as their positions in the alphabet.
 36. (d) Each number of the series is the double of the preceding number.

Directions (Q. 37-40): Since U and Y are unmarried, the two couples will be (Z-V) and (W-X). U and W will be Artists out of which W is married and U is unmarried. Now from the information (IV), (V) and (VI), we get that W, the male Artist, is married to X, a lady Sociologist & Z, male CA, is married to V, a female Teacher.

	CA	Artists	Teacher	Sociologist
U	X	✓	X	X
V	X	✓	✓	X
W	X	✓	X	X
X	X	X	X	✓
Y	✓	X	X	X
Z	✓	X	X	X

37. (a) Male CA. Z is married to Female Teacher V.
 38. (e) Female X is Sociologist.
 39. (b) WX and ZV are the married couples.
 40. (b) Profession of V is Teacher

Reading Comprehension And Verbal Ability

41. Solution: "Pan" is a prefix that means 'all' or 'everything'. In the context of this passage, the prefix has been used with the word dimensional, to describe certain beings. Therefore, in this context the meaning is that the beings are from every dimension.

"Hyperspatial" means 'pertaining to a huge amount of space.'

"Magrathea" is a legendary planet- according to the passage.

"Fjords" are 'long narrow inlets of the sea between cliffs.'

Hence, the correct answer is option 1.

42. Solution: It has been mentioned in the passage that Slartibartfast is a planetary coastline designer responsible for the fjords in Norway. It has also been mentioned that he referred to the archival recordings to tell the characters about Deep thought.

Hence, the correct answer is option 3.

43. Solution: The author mentions that the computer (Earth) was 'often mistaken for a planet'. Therefore, the author would disagree with this statement.

It has been mentioned that the mice created a 'phony question' not an 'answer'. Hence, the correct answer is option 4.

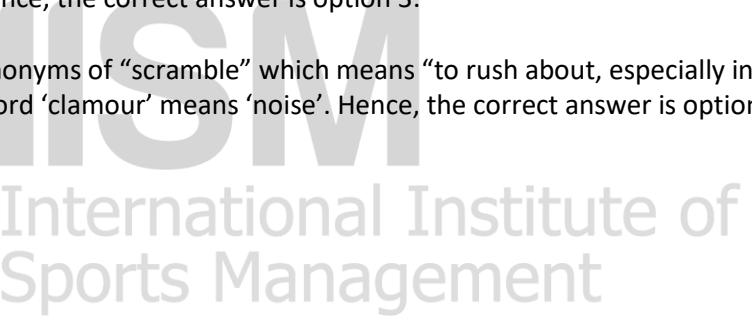


44. Solution: Option 1 can be inferred from the first paragraph- "...it is now considered by wealthy countries to be a human rights violation, and is outlawed, while some poorer countries may allow or tolerate it".
 Option 2 can be also be inferred from the first paragraph - "...children as young as four were employed in production factories with dangerous, and often fatal, working conditions".
 Option 4 can be inferred from the following- "The children of the poor were expected to help towards the family budget, often working long hours in dangerous jobs and low wages".
 The first sentence of the passage, "During the Industrial Revolution, children as young as four were employed in production factories with dangerous, and often fatal, working conditions" determines the fact that option 3 cannot be inferred from the passage. Hence, the correct answer is option 3

45. Solution: The passage is about child labour in the context of the Industrial revolution, mainly in the 19th century. It focuses on the exploitative nature of child labour. The title should also incorporate the fact that in recent times, most wealthy nations have outlawed this practice.
 Option 3 focusses on the ignominious past of child labour and is the best fit.
 Option 1 can be negated as the changes required to revolutionize child labour have not been mentioned in the passage. The passage does mention that laws were passed with regard to number of working hours and age but they were very limited in scope and we cannot infer from them that they succeeded in "revolutionizing" child labour.
 Option 2 can be eliminated as it mentions "present". The present state of child labour has not been mentioned in the passage.
 Option 4 is inappropriate as it fails to focus on the crux of the passage. The passage is about the shameful history of child labour, with almost no focus on the present conditions of child labourers. The passage does mention the hazardous conditions, low wages and often short life spans of child labourers during the Industrial Revolution but does not mention why we need to do away with child labour now. Hence, the correct answer is option 3.

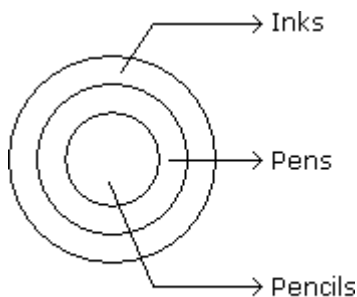
46. Solution: 'Scuttle', 'scurry' and 'clamber' are synonyms of "scramble" which means "to rush about, especially in narrow spaces using one's hands and feet". The word 'clamour' means 'noise'. Hence, the correct answer is option 4.

- 47. a
- 48. a
- 49. b
- 50. b
- 51. (d) out
- 52. (d) by
- 53. (c) on
- 54. (a) at
- 55. c
- 56. a
- 57. c



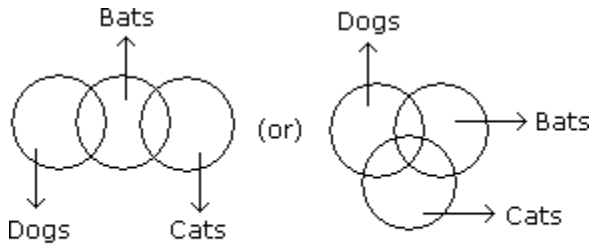
Verbal Reasoning

58. Ans. e



Both (1) and (2) follow.

59. Ans. d



None of the two follows.

60. Ans. b

Clearly, nothing about 'other things' is mentioned in the statement. So, I does not follow. Also, since it is mentioned that programmes and magazines for women are stuffed with kitchen recipes and other household hints, it means that women have special interest in these areas. So, II follows.

61. Ans. b

According to the statement, sea transport is cheaper than road transport in the case of route from Bombay to Jafra, not in all the cases. So, conclusion I does not follow. The statement stresses on the saving of fuel. So, conclusion II follows.

62. Ans. d

Clearly, every person must be free to work wherever he wants and no compulsion should be made to confine one to one's own country. So, argument I is vague. However, talented scientists can be of great benefit to the nation and some alternatives as special incentives or better prospects may be made available to them to retain them within their motherland. So, argument II also does not hold.

63. Ans. b

Clearly, argument I is vague because at present too, many fields are open to all after graduation. However, eliminating the post-graduate courses would abolish higher and specialized studies which lead to understanding things better and deeply. So, argument II is valid.

64. Ans. b

Clearly, the statement stresses that the contribution of retired Professors shall be beneficial. This means that these people's experience regarding working of the organisation is helpful. So, only course II follows.

65. Ans. a

Clearly, a study of rival products in the market will help assess the cause for the lowering down of sales and then a suitable action can be taken. Thus, only I follow.

Sports Awareness (66-90)

66. (b) Table Tennis

67. (a) Golf

68. (c) Polo

69. (a) Cricket

70. (b) Hockey

71. (b) Bangladesh

72. (b) Asian Games Federation

73. (b) Manish Pandey

74. (c) Chess

75. (c) Basket Ball

76. (b) Golf



- 77. (a) Viswanathan Anand
- 78. (c) Union of European Football Associations
- 79. (c) England
- 80. (b) Jag Mohan Dalmiya
- 81. (a) Boost
- 82. (c) Chasers
- 83. (c) 2001
- 84. (a) Abhinav Bindra
- 85. (d) 45 gms
- 86. (d) Pakistan
- 87. (c) Horse Races
- 88. (d) 5
- 89. (a) Rugby Football
- 90. (d) Show Jumping









Sports Awareness (66-90)



