

ANSWER SET - 39

01. (4) 02. (2) 03. (3) 04. (4) 05. (3)
 06. (2) 07. (2) 08. (2) 09. (4) 10. (3)
 11. (3) 12. (3) 13. (4) 14. (3) 15. (2)
 16. (2) 17. (3) 18. (3) 19. (3) 20. (1)
 21. (2) 22. (1) 23. (2) 24. (3) 25. (4)
 26. (1) 27. (2) 28. (2) 29. (1) 30. (1)
 31. (2) 32. (2) 33. (3) 34. (2) 35. (2)
 36. (3) 37. (1) 38. (2) 39. (2) 40. (1)
 41. (3) 42. (3) 43. (2) 44. (2) 45. (3)
 46. (3) 47. (3) 48. (1) 49. (2) 50. (3)
 51. (4) 52. (1) 53. (1) 54. (4) 55. (1)
 56. (2) 57. (1) 58. (1) 59. (3) 60. (3)
 61. (4) 62. (3) 63. (1) 64. (1) 65. (1)
 66. (3) 67. (4) 68. (1) 69. (2) 70. (2)
 71. (1) 72. (1) 73. (1) 74. (4) 75. (1)
 76. (1) 77. (2) 78. (4) 79. (4) 80. (3)
 81. (1) 82. (1) 83. (2) 84. (4) 85. (3)
 86. (3) 87. (1) 88. (1) 89. (4) 90. (4)
 91. (4) 92. (4) 93. (3) 94. (3) 95. (2)
 96. (1) 97. (3) 98. (4) 99. (1) 100. (3)

EXPLANATION - 39

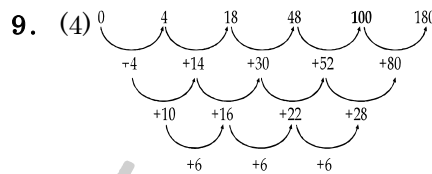
1. (4) HGUOR : HTOOMS ::
 HGUOT : REDNET
 ROUGH SMOOTH TOUGH
 TENDER
2. (2) **Mathematics** is related to
Numbers.
 Similarly, **History** is related to
Events.
3. (3) Status of clock on Tuesday 5
 p.m. = 3 min. slow
 Status of clock on Wednesday (11
 pm.)
 = 5 min. fast
 Change in time in 30 hours
 = 8 minutes
 Change in clock per hour
 = $\frac{8}{30}$ minutes
 As the clock was 3 minutes slow
 on Tuesday 5 pm. Hence, if the
 difference of 3 minutes is reduced
 to zero, then, the clock will show
 correct time.
 Hence, time taken to move 3
 minutes
 = $\frac{3}{\frac{8}{30}}$ hours
 = $\frac{3 \times 30}{8}$ hours
 = $\frac{90}{8}$ hours
 = $11\frac{2}{8}$ hours
 So, the clock had shown the
 correct time on Wednesday
 morning 4 : 15.

4. (4) Yellow is not present in option
 'D'.
5. (3) Except option (3), all are the
 functions of a human body.
6. (2) (1) BCDF — Consonants
 (2) AEIO — Vowels
 (3) GHTK — Consonants
 (4) RNWX — Consonants

7. (2) Literary Litter
 d b

Little Live Living
 c a e

8. (2) a c b c/a c b c/a c b c/a c b c a/
 c b c

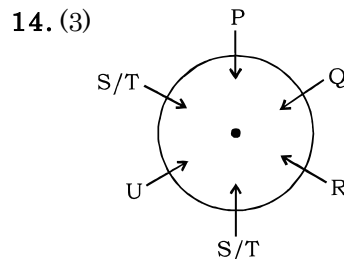


10. (3)

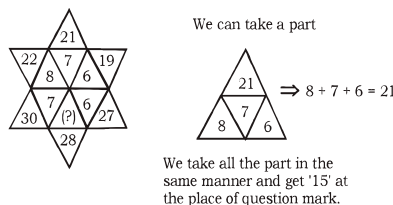
11. (3)

12. (3)

13. (4) PRINCIPAL $\xrightarrow{\text{Reverse Order}}$
 LAPICNIRP
 Similarly,
 ADOLESCENCE $\xrightarrow{\text{Reverse Order}}$
 ECNECSELODA



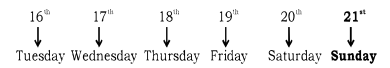
15. (2)



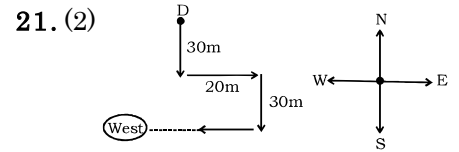
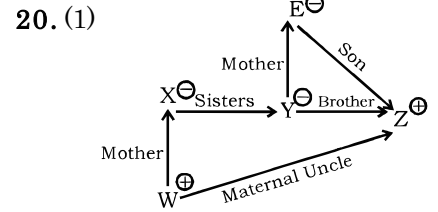
16. (2) $22 + 24 = 46$ (middle number)
 $27 + 31 = 58$ (middle number)
 Similarly,
 $32 + x = 68$
 $x = 68 - 32 = 36$

17. (3) GOVINDA
 18. (3) If 2nd of a month is Tuesday
 hen, 9th and 16th of that month

will also be Tuesday.



19. (3)



22. (1) $(4^3)+4 = 68$, $(5^3)+5 = 130$, $(6^3)+6 = 222$, $(7^3)+7 = 350$, $(8^3)+8 = 520$

23. (2)
 24. (3) 40 triangles, 7 squares.

25. (4) D \Rightarrow 95, 88, 79, 66, 57

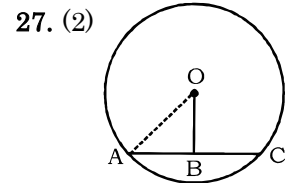
A \Rightarrow 40, 32, 24, 13, 01

K \Rightarrow 42, 31, 23, 10, 01

U \Rightarrow 44, 33, 21, 12, 00

26. (1) ATQ,
 Relative speed = $(40 + 50)$ km/hr
 = $90 \times \frac{5}{18}$ m/s
 = 25 m/s
 Relative distance = $180 + 220 = 400$ m

Required time = $\frac{400}{25} = 16$ sec



OB = 3 cm

AB = $\frac{1}{2} \times 8 = 4$ cm

OA = $\sqrt{4^2 + 3^2} = 5$ cm

28. (2) M : W

7 : 5

7 : 8

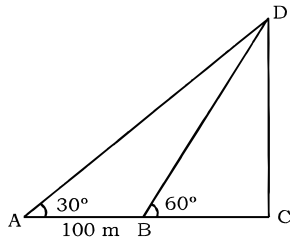
If 3 ratio is increased, then
 quantity of new mixture = 15
 If 15 litre is increased, the
 quantity of new mixture

= $\frac{15}{3} \times 15 = 75$ litres

So, the quantity of water added

$$= \frac{15}{3} \times 8 = 40$$

29. (1)



In $\triangle BCD$

$$\frac{BC}{CD} = \cot 60^\circ$$

$$CD = \sqrt{3} BC$$

In $\triangle ACD$

$$\frac{AC}{CD} = \cot 30^\circ$$

$$100 + BC = \sqrt{3} BC \times \sqrt{3}$$

$$2 BC = 100$$

$$BC = 50$$

Width of the river = 50 m

30. (1) Average speed for the journey

$$= \frac{30 + 40}{\frac{30}{6} + 5}$$

$$= \frac{70}{10} = 7 \text{ km/hr}$$

31. (2) L.C.M of 16, 24, 30 & 36 = 720

So, largest 5 digit number is = 99360

ATQ,

$$\text{Required number} = 99360 + 10 = 99370$$

$$32. (2) \frac{5a-3}{a} + \frac{5b-3}{b} + \frac{5c-3}{b} = 0$$

$$5 - \frac{3}{a} + 5 - \frac{3}{b} + 5 - \frac{3}{b} = 0$$

$$\frac{3}{a} + \frac{3}{b} + \frac{3}{c} = 15$$

$$\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 5$$

33. (3) Let total number of students

= x

ATQ,

$$(x-15)(8) = 200$$

$$x - 15 = 25$$

$$x = 40$$

34. (2) $1 + \tan \theta = \sqrt{2}$

$$\tan \theta = \sqrt{2} - 1$$

$$\cot \theta = \frac{1}{\sqrt{2} - 1} = \sqrt{2} + 1$$

$$\cot \theta = \sqrt{2}$$

35. (2) $2^{x+3} = 32 = 2^5$

$$x + 3 = 5 - 3 = 2$$

$$3^{x+1} = 3^{2+1} = 27$$

36. (3) $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right) \dots \dots \left(1 - \frac{1}{100}\right)$

$$= \frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \dots \dots \times \frac{99}{100}$$

$$= \frac{1}{100} = 0.01$$

37. (1) Selling Price = ₹ 234

Less % = 22%

$$\text{Cost Price} = ₹ \left(234 \times \frac{100}{78}\right)$$

$$= ₹ 300$$

Profit % = 13%

New selling price

$$= ₹ \left(300 \times \frac{113}{100}\right) = ₹ 339$$

38. (2) Reduced Price

$$= \frac{100 \times 20}{2} = ₹ 10$$

39. (2) C + D = E + F

40. (1) Quantity of mixture = 40 litres

Blue paint = 10%

$$\text{So, white paint} = 40 \times \frac{90}{100}$$

$$= 36 \text{ litre}$$

ATQ,

So, quantity of new mixture

$$= 36 \times \frac{100}{80} = 45 \text{ litres}$$

$$\text{Blue paint added} = 45 - 40 = 5 \text{ litres}$$

41. (3) ATQ,

$$3362 = 3200 \left(1 + \frac{10}{4 \times 100}\right)^T$$

$$\frac{3362}{3200} = \left(\frac{41}{40}\right)^T$$

$$\left(\frac{41}{40}\right)^T = \frac{1681}{1600} = \left(\frac{41}{40}\right)^2$$

$$T = 2$$

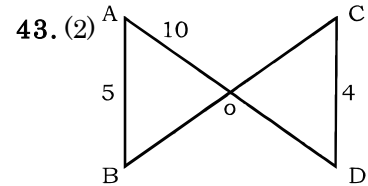
So, time period = $2 \times 3 = 6$ months

42. (3) ATQ,

$$7803 = P \left(1 + \frac{4}{2 \times 100}\right)^2$$

$$P \left(\frac{51}{50}\right)^2 = 7803$$

$$P = \frac{7803 \times 2500}{2601} = ₹ 7500$$



$$OD = \frac{10}{5} \times 4 = 8 \text{ cm}$$

44. (2) Area of the grassy plot with path

$$= 110 \times 65$$

$$= 7150 \text{ m}^2$$

Area of the grassy plot without path

$$= (110 - 5)(65 - 5)$$

$$= 105 \times 60 = 6300 \text{ m}^2$$

So, area of the path = $7150 - 6300 = 850 \text{ m}^2$

45. (3) Side of the regular hexagon = 2a

Area of the regular hexagon

$$= \frac{3\sqrt{3}}{2} (2a)^2$$

$$= 6\sqrt{3}a^2$$

46. (3) Radius of circular cone = 6 m

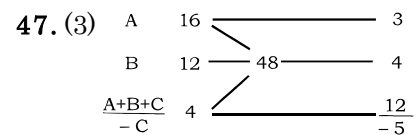
Slant height = 10 m

Total surface area of cone

$$= \pi r l + \pi r^2$$

$$= \frac{22}{7} \times 6(10 + 6)$$

$$= \frac{2112}{7} \text{ m}^2$$



So, C can do the work in

$$= \frac{48}{5} = 9\frac{3}{5} \text{ days}$$

48. (1) Required difference

$$= \frac{42 - 22}{100} \times 600 = 120 \text{ lakhs}$$

49. (2) Funds used in school

$$\text{maintenance} = \frac{64.8^\circ}{360^\circ} \times 100$$

$$= 18\%$$

$$\text{Required Amount} = \frac{42 - 18}{100} \times 600$$

= 144 lakhs

50. (3) Fund utilized for scholarship

$$= \frac{86.4^\circ}{360^\circ} \times 100$$

$$= 24\%$$

ATQ,

$$\text{Required percentage} = \frac{24}{28} \times 100$$

$$= \frac{600}{7} = 85\%$$

86. (3) 'Commodity' should come in place of the blank. Since, here the sentence talks of the labour market, 'man' cannot be a glut or an epidemic. So, (2) and (4) are ruled out. Now, 'Man' can be an 'investment', but (3) commodity sounds 'a better choice, as 'still' points to some negativity here.

87. (1) Out of the given options, only 'irresistible' is the one that fits the given blank. Irritable means 'something' that cannot be resisted and its the best choice available.

Meaning of other words –

- Irritable – Easily irritated or annoyed
- Irascible – Easily angered
- Delectable – Greatly pleasing to the taste.

89. (4) The phrase 'Eager beaver' is used to describe someone who is extraordinarily industrious or zealous. So, (4) is the correct choice.

For example –

"Who's the eager beaver who came in at the weekend to finish this work off?"

91. (3) A sheet anchor is a phrase used to refer to a source of aid in times of emergency or danger. So, (3) is the correct answer.

For example –

"Hope is the sheet anchor of my life."

92. (4) The given sentence in its present form is completely correct and needs no improvement.

93. (3) 'have nothing else' should replace the underlined part in order to improve the given sentence. None of the other options make sense.