

25. (C) The hands of a clock coincide 11 times in every 12 hours (Since between 11 and 1, they coincide only once, i.e., at 12 o'clock).
26. (B) CP. of 600 mangoes = $6 \times 125 = ₹ 750$
 S.P. of 600 mangoes = $750 + 150 = ₹ 900$
 \therefore S.P. of 12 mangoes = $\frac{900}{600} \times 12 = ₹ 18$
27. (C) Rate = $\frac{\text{S.I} \times 100}{\text{Principle} \times \text{Time}}$
 $= \frac{9 \times 100}{1 \times 60} = 15\%$ per annum
28. (B) Length of the largest possible square tile
 = HCF of 5.44 m and 3.74 m
 = HCF of 544 cm and 374 cm
 = 34 cm
29. (B) Let the amount of milk and water are $5x$ and $4x$ respectively.
 By question, $\frac{5x}{x+5} = \frac{5}{2}$
 $\Rightarrow 2x = x + 5 \therefore x = 5$
 \therefore amount of milk = $5x = 5 \times 5 = 25$ L
30. (C) LCM = $2 \times 3 \times 3 \times 2 \times 5 = 180$ seconds
 = 3 minutes
 \therefore Required answer = $\frac{30}{3} + 1 = 11$
31. (D) $? = \frac{6.5 \times 4.7 + 6.5 \times 5.3}{1.3 \times 7.9 - 1.3 \times 6.9}$
 $= \frac{6.6(4.7 + 5.3)}{1.3(7.9 - 6.9)} = \frac{6.5 \times 10}{1.3} = 50$
32. (B) Ravi's present age = $3x$ years.
 Jai's present age = $2x$ years
 4 years ago,
 $(3x - 4) - (2x - 4) = 6 \Rightarrow x = 6$
 \therefore Jai's present age = $2x$
 = $2 \times 6 = 12$ years
33. (B) Let the integer be x .
 According to the question,
 $x^2 - 15x = 16$
 $\Rightarrow x(x - 15) = 16 (16 - 15)$
 $\Rightarrow x = 16$
34. (D) The pattern is :
 $5 \times 2 - 2 = 10 - 2 = 8$
 $8 \times 2 - 2 = 16 - 2 = 14$
 $14 \times 2 - 2 = 28 - 2 = 26$
 $26 \times 2 - 2 = 52 - 2 = 50$
 $50 \times 2 - 2 = 100 - 2 = \boxed{98}$
35. (A) 3 men can do the work in 6 days.
 5 women can do the same work in 18 days.
 $\therefore (3 \times 6)$ men = (5×18) women
 $\Rightarrow 1$ man = 5 women
 $\therefore 4$ men + 10 women = $(20 + 10)$ women
 = 30 women
 $\therefore M_1 D_1 = M_2 D_2$
 $\Rightarrow 5 \times 18 = 30 \times D_2$
 $\Rightarrow D_2 = \frac{5 \times 18}{30} = 3$ days.
36. (C) $A + B = 60^\circ$ (i)
 $A - B = 30^\circ$ (ii)
 $2A = 90^\circ$
 $A = 45^\circ$
 and $B = 15^\circ$
 Now, $\text{Sin}A \times \text{Cos}A$
 = $\text{Sin}45^\circ \times \text{cos}45^\circ$
 $= \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{2}$
37. (B) According to question,
 $A = \frac{3}{2} B$
 $\Rightarrow A : B = 2 : 3$
 Again, $B = \frac{C}{2}$
 $\Rightarrow B : C = 1 : 4 = 3 : 12$
 $\therefore A : B : C = 2 : 3 : 12$
 Sum of ratios = $2 + 3 + 12 = 17$
 $\therefore A \Rightarrow \text{Rs.} \left(\frac{2}{17} \times 680 \right) = ₹ 80$
 $B \Rightarrow \text{Rs.} \left(\frac{3}{17} \times 680 \right) = ₹ 120$
 $C \Rightarrow \text{Rs.} \left(\frac{12}{17} \times 680 \right) = ₹ 480$
38. (D) \therefore P completes a work in 20 days.
 \therefore P completes the Parts work in $\frac{1}{20}$ day.
 like this, Q complete a work in 1 day is $\frac{1}{40}$.
 Both work alternately,
 So, the work of two days
 $= \frac{1}{20} + \frac{1}{40}$
 $= \frac{2+1}{40} = \frac{3}{40}$
 So,
 $\frac{3}{40} \times 13 + \frac{1}{40} = \frac{39}{40} + \frac{1}{40} = \frac{40}{40} = 1$
 \therefore total time taken
 = $2 \times 13 + 1 = 27$ days.

39. (D) We know that diagonal of cube
 $= 2\sqrt{3}$ cm

Diagonal $= \sqrt{3} \times \text{side}$

$\therefore 2\sqrt{3}$ cm $= \sqrt{3}$ side

$\therefore \text{side} = 2$ cm

Surface area of cube $= 6 \times (\text{side})^2$
 $= 6 \times (2\text{cm})^2 = 24 \text{ cm}^2$

40. (D) $\frac{1}{(1 + \tan^2 \theta)} + \frac{1}{(1 + \cot^2 \theta)}$

$= \frac{1}{\sec^2 \theta} + \frac{1}{\operatorname{cosec}^2 \theta}$

$= \cos^2 \theta + \sin^2 \theta = 1$

41. (C) SI $= \frac{\text{Principal} \times \text{Rate} \times \text{Time}}{100}$

$= \frac{2400 \times 12 \times 5}{100 \times 2} = ₹ 720$

\therefore Amount to be paid $= 2400 + 720$
 $= ₹ 3120$

$\therefore 1200 + \text{Cost of cow} = ₹ 3120$

$\therefore \text{Cost of cow} = 3120 - 1200 = ₹ 1920$

42. (B) H.C.F. $= 37$

So, Let biggest number $= 37x$ and smallest
 $= 37y$

$\therefore \text{L.C.M.} = 37xy$

By question, L.C.M.

$= \frac{\text{Product of both numbers}}{\text{H.C.F.}}$

$\therefore 37xy = \frac{4107}{37} = 111$

$\therefore xy = \frac{111}{37} = 3 \times 1$

So $x = 3$ and $y = 1$ (it is possible)

\therefore biggest number is $37x$

$= 37 \times 3 = 111$

43. (A) Capacity of bucket $= x$ litres

$\therefore \left(80 - 66\frac{2}{3}\right)\%$ of $x = 2$

$\Rightarrow \left(80 - \frac{200}{3}\right) \times \frac{x}{100} = 2$

$\Rightarrow \frac{240 - 200}{3} \times \frac{x}{100} = 2$

$\Rightarrow 40x = 2 \times 300$

$\Rightarrow x = \frac{2 \times 300}{40} = 15$ litres

44. (A) $\frac{1}{1 + \frac{1}{1 + \frac{1}{x}}} = 2$

$\Rightarrow \frac{1}{1 + \frac{1}{x+1}} = 2$

$\Rightarrow \frac{1}{1 + \frac{x}{x+1}} = 2$

$\Rightarrow \frac{1}{\frac{x+1+x}{x+1}} = 2 \Rightarrow \frac{x+1}{2x+1} = 2$

$\Rightarrow 4x + 2 = x + 1$

$\Rightarrow 4x - x = 1 - 2 \Rightarrow 3x = -1$

$\Rightarrow x = -\frac{1}{3}$

45. (B) Initial quantity of iron $= 3x$ kg.

Quantity of carbon $= 4x$ kg.

On adding 120 kg. of iron,

$\frac{3x+120}{4x} = \frac{5}{4}$

$\Rightarrow 20x = 12x + 480$

$\Rightarrow 20x - 12x = 480$

$\Rightarrow 8x = 480 \Rightarrow x = \frac{480}{8} = 60$

\therefore Initial quantity of iron $= 3x$

$= 3 \times 60 = 180$ kg.

46. (C) Required average

$= \frac{16+19+16+18+13}{5} \times 1000$

$= \frac{84}{5} \times 1000$

$= ₹ 16800$

47. (B) Required ratio $= 16 : 8 = 2 : 1$

48. (A) Required % $= \frac{2}{18} \times 100\%$

$= \frac{100}{9}\% = 11\frac{1}{9}\%$

49. (D) See the table

50. (C) Total amount $= (18 + 18) \times 1000$
 $= ₹ 36000$



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RRB MOCK TEST-11 (ANSWER KEY)

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|---------|---------|---------|----------|
| 1. (D) | 26. (B) | 51. (D) | 76. (A) |
| 2. (B) | 27. (C) | 52. (B) | 77. (A) |
| 3. (A) | 28. (B) | 53. (B) | 78. (A) |
| 4. (C) | 29. (B) | 54. (A) | 79. (D) |
| 5. (D) | 30. (C) | 55. (A) | 80. (A) |
| 6. (D) | 31. (D) | 56. (B) | 81. (B) |
| 7. (D) | 32. (B) | 57. (A) | 82. (A) |
| 8. (D) | 33. (B) | 58. (A) | 83. (C) |
| 9. (D) | 34. (D) | 59. (C) | 84. (B) |
| 10. (C) | 35. (A) | 60. (B) | 85. (B) |
| 11. (B) | 36. (C) | 61. (D) | 86. (A) |
| 12. (C) | 37. (B) | 62. (D) | 87. (B) |
| 13. (B) | 38. (D) | 63. (B) | 88. (B) |
| 14. (A) | 39. (D) | 64. (A) | 89. (D) |
| 15. (A) | 40. (D) | 65. (A) | 90. (B) |
| 16. (B) | 41. (C) | 66. (A) | 91. (D) |
| 17. (C) | 42. (B) | 67. (A) | 92. (B) |
| 18. (D) | 43. (A) | 68. (B) | 93. (A) |
| 19. (B) | 44. (A) | 69. (A) | 94. (A) |
| 20. (A) | 45. (B) | 70. (A) | 95. (C) |
| 21. (D) | 46. (C) | 71. (B) | 96. (C) |
| 22. (B) | 47. (B) | 72. (D) | 97. (A) |
| 23. (D) | 48. (A) | 73. (D) | 98. (D) |
| 24. (C) | 49. (D) | 74. (C) | 99. (B) |
| 25. (C) | 50. (C) | 75. (B) | 100. (C) |