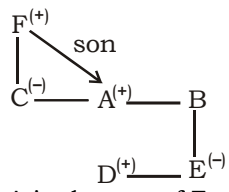
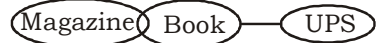
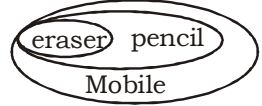

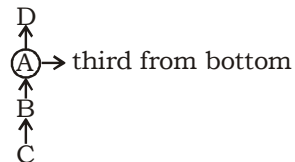
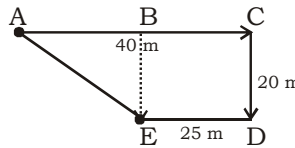


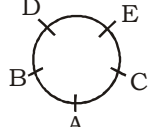
RRB MOCK TEST-10 (Solution)

1. (B) $(2)^2 = 4;$ $(2+1)^2 = 9;$
 $(3+1)^2 = 16;$ $(4+1)^2 = 25;$
 $(5+1)^2 = 36$ and $(6+1)^2 = 49$
2. (A) The given series is as follows:-
 $3 + 5 = 8;$ $8 + 10 = 18$
 $18 + 15 = 33;$ $33 + 20 = 53$
 and $53 + 25 = 78$
3. (C)
4. (C) Place value of each term in JULY is 9-20-11-24
 Hence, the place value of each term in AUGUST is 0-20-6-20-18-19.
5. (C) Given 81 D 9 C 12 B 3 A 11
 Putting the sign
 $81 \div 9 \times 12 + 3 - 11$
 $= 9 \times 12 + 3 - 11$
 $= 111 - 11 = 100$
6. (C)
7. (D) 
8. (B) Book is written by Author in the same way food is cooked by cook.
9. (C) acbca/acbca/acba
10. (C)
11. (A) From second figure $(8 \times 9 - 7 \times 6) = 30$
 Similarly,
 In the first figure,
 $(6 \times 9 - 3 \times 5) = 39$
12. (B) 
 I. False
 II. True
13. (B) 
 I. False
 II. True
14. (D) 
 I. True
 II. True
15. (C) 

16. (B)
17. (D) The correct arrangement is:
Root → Stam → leaves → flower → Fruit
 3 1 5 2 4

18. (B)
19. (C) 
 Required distance = $\sqrt{AB^2 + BE^2}$
 $= \sqrt{15^2 + 20^2}$
 $= \sqrt{225 + 400}$
 $= \sqrt{625}$
 $= 25 \text{ m}$

20. (B) Total number of boys in row
 $= (12 + 4) - 1 = 15$
21. (B) In first figure
 $48 \div 4 = 12$ and $\sqrt{25} = 5$
 In second figure
 $64 \div 4 = 16$ and $\sqrt{81} = 9$
 In third figure,
 $60 \div 4 = 15$ and $\sqrt{49} = 7$
22. (D) All others live both on land and water.
23. (A) The colours adjacent to yellow are orange, blue, red and rose. Hence violet will be opposite to yellow.

24. (B)
25. (A) 
 E is just right of C.

26. (C) ATQ,
 $40 = \frac{S.P - C.P}{S.P} \times 100$
 $\Rightarrow \frac{40}{100} = \frac{SP - CP}{SP}$
 $\Rightarrow \frac{2}{5} = \frac{SP - CP}{SP}$
 $\Rightarrow 2SP = 5SP - 5CP$
 $\Rightarrow 3SP = 5CP$
 $\Rightarrow \frac{CP}{SP} = \frac{3}{5}$

$$\therefore \text{Profit \% on CP} = \left(\frac{2}{3} \times 100 \right) \% = 66\frac{2}{3} \%$$

27. (B) Gaurav worked for x days.
 Nazish worked for $(x + 5)$ days.

$$\text{Gaurav's 1 day's work} = \frac{1}{15}$$

$$\text{Nazish's 1 day's work} = \frac{1}{10}$$

$$\therefore \frac{x}{15} + \frac{x+5}{10} = 1$$

$$\Rightarrow \frac{2x+3x+15}{30} = 1$$

$$\Rightarrow 5x + 15 = 30$$

$$\Rightarrow 5x = 15 \Rightarrow x = 3 \text{ days}$$

28. (D) $\frac{p}{q} = \frac{7}{8} \quad \dots(1)$

$$\frac{q}{r} = \frac{12}{7} \quad \dots(2)$$

Multiplying both the equation

$$\frac{p}{q} \times \frac{q}{r} = \frac{7}{8} \times \frac{12}{7}$$

$$\Rightarrow \frac{p}{r} = \frac{3}{2}$$

$$\therefore p : r = 3 : 2$$

29. (B) $5852 \div 28 \times ? - 1653 = 1064$

$$\Rightarrow \frac{5852}{28} \times ? = 1653 + 1064 = 2717$$

$$\Rightarrow 209 \times ? = 2717$$

$$\Rightarrow ? = \frac{2717}{209} = 13$$

30. (C) Let the 3-digit number be x
According to the question,

$$\frac{x \times 30}{100} = 190.8$$

$$\Rightarrow x = \frac{190.8 \times 100}{30} = 636$$

$$\therefore 150\% \text{ of } 636 = \frac{636 \times 150}{100} = 954$$

31. (C) Sum of remaining 48 numbers
 $= 40 \times 50 - 45 - 55 = 1900$

$$\therefore \text{Required average} = \frac{1900}{48} = 39.58$$

32. (B) $\frac{a}{b} = \frac{4}{5}; \frac{b}{c} = \frac{15}{16}$

$$\therefore \frac{a}{b} \times \frac{b}{c} = \frac{4}{5} \times \frac{15}{16}$$

$$\Rightarrow \frac{a}{c} = \frac{3}{4} \Rightarrow \frac{a^2}{c^2} = \frac{9}{16}$$

$$\therefore \frac{c^2 - a^2}{c^2 + a^2} = \frac{1 - \frac{a^2}{c^2}}{1 + \frac{a^2}{c^2}}$$

(On dividing numerator and denominator by c^2)

$$= \frac{1 - \frac{9}{16}}{1 + \frac{9}{16}} = \frac{16 - 9}{16 + 9} = \frac{7}{25}$$

33. (B) (A + B)'s 1 day's work

$$= \frac{1}{24} + \frac{1}{12} = \frac{2+1}{24} = \frac{3}{24}$$

34. (C) Principal = P

If becomes thrice in 20 years.

So amount = 3P

$$\therefore \text{Interest} = 3P - P = 2P$$

$$\therefore \text{Interest} = \frac{P \times R \times T}{100}$$

$$\Rightarrow 2P = \frac{P \times 20 \times R\%}{100}$$

$$\Rightarrow R = \frac{2P \times 100}{20P} = 10\%$$

35. (C) Numbers = 2x and 3x

Their LCM = $2 \times 3 \times x = 6x$

$$\therefore 6x = 54 \Rightarrow x = \frac{54}{6} = 9$$

$$\therefore \text{Sum of numbers} = 2x + 3x$$

$$= 5x = 5 \times 9 = 45$$

36. (C) $1 + \frac{3}{4} \times 1 + \frac{1}{4} \times \sqrt{3}$
 $1 - \frac{3}{4} \times 1 - \frac{1}{4} \times \sqrt{3}$

$$= \frac{7}{4} \times \frac{5}{4} \times \sqrt{3}$$

$$= 7 \times 5 \times \sqrt{3} = 35\sqrt{3}$$

37. (D) Area of room = $12 \text{ m} \times 8 \text{ m} = 96 \text{ m}^2$

Total spent = $96 \text{ m}^2 \times 15/\text{m}^2 = ₹ 1440$

38. (A) Let the income of C = ₹ 125

$$\therefore \text{income of B} = ₹ 125 \times \frac{80}{100} = ₹ 100$$

$$\therefore \text{income of A} = ₹ 100 \times \frac{110}{100} = ₹ 110$$

$$\therefore \text{Ratio of income of A, B and C} = 110 : 100 : 125 = 22 : 20 : 25$$

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39. (B) Let the speed of man = x km/h and the speed of stream = y km/h.

$$\therefore x + y = \frac{26}{2} \text{ km/h}$$

$$\Rightarrow x + y = 13 \quad \dots(1)$$

$$\text{and } x - y = \frac{14}{2} \text{ km/h}$$

$$\Rightarrow x - y = 7 \quad \dots(2)$$

adding eq.(1) and (2), we get

$$2x = 20 \Rightarrow x = 10 \text{ km/hr}$$

$$\text{and } y = 3 \text{ km/hr.}$$

\therefore Speed of stream of river = 3 km/h.

40. (B) Fraction = $\frac{6}{8}$ (from option)

$$\text{Illustration} = \frac{6}{8+4} = \frac{6}{12} = \frac{1}{2}$$

$$\text{and } \frac{6-5}{8} = \frac{1}{8}$$

41. (A) Volume of sphere = $\frac{4}{3} \pi r^3$

$$= \left(\frac{4}{3} \times \pi \times 9 \times 9 \times 9 \right) \text{ cu.cm} = 972 \pi \text{ cu.cm.}$$

42. (C) Ratio of the share of profit between P and Q = $(600 \times 4) : (800 \times 2)$
= $2400 : 1600 = 3 : 2$

43. (A) Age of teacher = $30 \times 13 - 30 \times 12$
= $390 - 360 = 30$ years

44. (D) Area of a regular hexagon

$$= \frac{3}{2} \sqrt{3} \text{ side}^2 = \frac{3}{2} \times \sqrt{3} \times (12)^2$$

$$= \frac{3}{2} \times \sqrt{3} \times 12 \times 12$$

$$= 18 \times 12 \times \sqrt{3} = 216\sqrt{3} \text{ sq. cm.}$$

45. (D) $\frac{\sin 30^\circ}{\sin(90^\circ - 30^\circ)} \times \frac{\cos 60^\circ}{\cos(90^\circ - 60^\circ)} \times \frac{2 \times \frac{1}{\sqrt{3}}}{(\sqrt{2})^2}$

$$= \frac{\sin 30^\circ}{\cos 30^\circ} \times \frac{\cos 60^\circ}{\sin 60^\circ} \times \frac{2}{\sqrt{3} \times 2}$$

$$= \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} \times \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} \times \frac{2}{\sqrt{3}}$$

$$= \frac{1}{\sqrt{3}} \times \frac{1}{\sqrt{3}} \times \frac{2}{2\sqrt{3}}$$

$$= \frac{1}{3\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{9}$$

46. (B) Required ratio = $(48 + 85 + 72 + 61 + 54) : (43 + 84 + 48 + 83 + 88)$

$$= 356 : 346$$

$$= 178 : 173$$

47. (D) Required Average marks

$$= \frac{84 + 88 + 98 + 45 + 43}{5}$$

$$= \frac{358}{5} = 71.6 \approx 72$$

48. (C) Required % = $\left(\frac{386 - 375}{375} \times 100 \right) \%$

$$= \left(\frac{11}{375} \times 100 \right) \% = 2.93\% \approx 3\%$$

49. (B) Total marks obtained by all the students in SST = $54 + 88 + 92 + 72 + 88$
= 394

50. (B) Required difference = $397 - 375 = 22$



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RRB MOCK TEST - 10 (ANSWER KEY)

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