RRB NTPC - PRACTICE SET

Answers with Explanation

1. (c)

M $\xrightarrow{+6}$ 19
A $\xrightarrow{+6}$ 7
C $\xrightarrow{+6}$ 9
H $\xrightarrow{+6}$ 14
I $\xrightarrow{+6}$ 15
N $\xrightarrow{+6}$ 20
E $\xrightarrow{+6}$ 11

Similarly,

D $\xrightarrow{+6}$ 10
A $\xrightarrow{+6}$ 7
N $\xrightarrow{+6}$ 20
G $\xrightarrow{+6}$ 13
E $\xrightarrow{+6}$ 11
R $\xrightarrow{+6}$ 24

2. (d)
3. (a)
4. (d)

Numbers :

$3 \xrightarrow{+3} 6 \xrightarrow{+5} 11 \xrightarrow{+7} 18 \xrightarrow{+9} (27)$

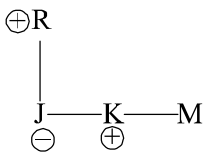
Letters :

$F \xrightarrow{+1} G \xrightarrow{+2} I \xrightarrow{+3} L \xrightarrow{+4} (P)$

5. (d) 

6. (d) From the statement

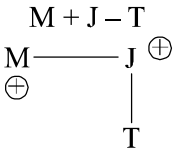
R – J ÷ K + M



Therefore, from the diagram it is clear that, K is son of R.

7. (a) From the statement,

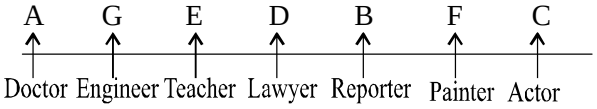
M + J – T



Therefore, from the diagram it is clear that, M is paternal uncle of T.

8. (c)
9. (c) According to their marks
Priya > Raj > Mukesh > Gaurav > Kavita
Clearly, in the descending order, Raj becomes second.
10. (d) Bopri–Kakran–Akram–Tokhada–Paranda
11. (c)

Sol : (12-13)



12. (b)
13. (d)
14. (d)

15. (b) In the first set, we have :

$$(21 - 17) \times \frac{5+7}{2} = 24.$$

In the second set, we have :

$$(28 - 25) \times \frac{13+7}{2} = 30$$

So the missing number in the third set.

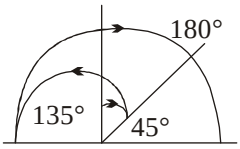
$$(16 - 10) \times \frac{2+8}{2} = 30$$

16. (a)
17. (c) G $\longrightarrow$ 7 $\longrightarrow$ 7 – 2 = 5
U $\longrightarrow$ 21 $\longrightarrow$ 21 – 2 = 19
L $\longrightarrow$ 12 $\longrightarrow$ 12 – 2 = 10
F $\longrightarrow$ 6 $\longrightarrow$ 6 – 2 = 4
Similarly

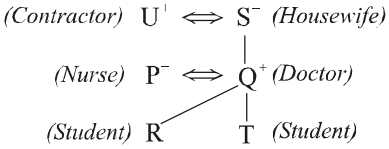
W ⟶ 23 ⟶ 23 – 2 = 21
I ⟶ 9 ⟶ 9 – 2 = 7
N ⟶ 14 ⟶ 14 – 2 = 12
E ⟶ 5 ⟶ 5 – 2 = 3

18. (a)

19. (a)



20. (a)

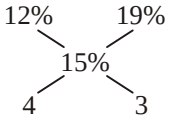


21. (c)
22. (c) The sum of numbers in the first, second, third, ……columns form the series
4, 9, 16, …i.e., 2^2, 3^2, 4^2, …
Let the missing number be x
Then, 2 + 10 + x = 25
or x = 25 – 12 = 13
23. (d)
24. (d)
25. (a)
26. (c)

27. (b)
28. (c)
29. (b)
30. (c) The series is
aaa/bbbb/cccc/dddd/cccc/bbbb/a.
31. (b) Quotient = 16
∴ Divisor = 25 × Quotient = 25 × 16 = 400
Now, Remainder = $\frac{1}{5}\times\text{Divisor}=\frac{1}{5}\times400=80$
Hence, Dividend
= Divisor × Quotient + Remainder
= 400 × 16 + 80
= 6400 + 80 = 6480
32. (c)
33. (a) Let, the numbers be 5x and 4x
∴ 40% of 5x = 12
$\Rightarrow \frac{40\times5x}{100}=12 \Rightarrow x=\frac{12\times100}{40\times5}=6$
Thus, second number = 6 × 4 = 24

∴ 50% of second number = $\frac{24\times50}{100}=12$

34. (d) ∵ A_1 = ₹880, A_2 = ₹920 and
t_1 = 2 yr, t_2 = 3 yr
∴ Interest for 1 yr = ₹(920 – 880) = ₹40
⇒ Interest for 2 yr = ₹80
Hence, Principal = ₹(880 – 80) = ₹800
35. (d)
36. (d) By method of alligation



Hence, quantity of sugar sold with profit of 19% = $\frac{3}{3+4}\times98=42$ kg
37. (d) Let, length of train = x m
Now, according to question,
$\frac{x+50}{14}=\frac{x}{10}$
⇒ 10x + 500 = 14x
⇒ 4x = 500 ⇒ x = 125 m
Now, the speed of train
= $\frac{125}{10}\times\frac{18}{5}=45$ km/h
38. (c)
39. (b)

40. (a)
41. (b)
42. (b) 18 – [5 – {6 + 2 (7 – $\overline{8-5}$)}]
= 18 – [5 – {6 + 2 (7 – 3)}]
= 18 – [5 – {6 + 2 × 4}]
= 18 – [5 – 14] = 18 + 9 = 27
43. (a) Let, age of Induj = x yr
Age of Nikunj = 2x yr
According to the question,
x + 2x = 24 ⇒ x = 8
Hence, age of Nikunj = 2 × 8 = 16 yr
44. (a) Let, the incomes of A, B and C be 3x, 7x and 4x respectively and their expenses are 4y, 3y and 5y respectively.
∴ 3x = 2400 ⇒ x = 800
and 3x – 4y = 300
⇒ 2400 – 300 = 4y

⇒ y = 2100/4 = 525
∴ Savings of B = 7x – 3y
= 7 × 800 – 3 × 525
= 5600 – 1575 = ₹4025
and savings of C = 4x – 5y
= 4 × 800 – 5 × 525
= 3200 – 2625 = ₹575

45. (a)
46. (b)
47. (b) P = 40000

R = 8%, Time = 3 yr

Difference between CI and SI for 3 yr

$$= P\times\left(\frac{R}{100}\right)^2\left(\frac{R}{100}+3\right)$$

$$= 40000\times\frac{8\times8}{100\times100}\left(\frac{8}{100}+3\right)$$

$$= 256\times\frac{77}{25} = ₹788.48$$

48. (a) $6399\times\frac{15}{8}+353\div?=12025$

$\Rightarrow 6400\times\frac{15}{8}+353\div?\approx12025$

$\Rightarrow 353 \div ? = 12025 - 12000$

$\Rightarrow ? = \frac{353}{25}\approx14$

49. (d)
50. (c) $\because$ h : d = 3 : 2

$\therefore$ h = 3x and r = $\frac{d}{2}=x$

We know that volume = $\frac{1}{3}\pi r^2h$

$\Rightarrow 1078=\frac{1}{3}\times\frac{22}{7}\times x\times x\times3x$

$\Rightarrow x^3=\frac{1078\times7}{22} \Rightarrow x=\sqrt[3]{343}=7$

Hence, height of cone = 3 × 7 = 21 cm

51. (c)
52. (c) $\because a^2+b^2+2b+4a+5 = 0$

$\Rightarrow a^2+4a+4+b^2+2b+1=0$

$\Rightarrow (a+2)^2 + (b+1)^2 = 0$

$\Rightarrow a+2 = 0$ and $b+1 = 0$

$\Rightarrow a = -2$ and $b = -1$

$\therefore \frac{a-b}{a+b}=\frac{-2+1}{-2-1}=\frac{-1}{-3}=\frac{1}{3}$

53. (d)
54. (b) $\because$ SI = ₹190, P_1 = ₹500, P_2 = ₹600, t_1 = 4 yr and t_2 = 3 yr

$\therefore SI=\frac{P_1\times r\times t_1}{100}+\frac{P_2\times r\times t_2}{100}$

$\Rightarrow 190 = \frac{500\times r\times4}{100}+\frac{600\times r\times3}{100}$

$\Rightarrow 190 = 20r + 18r \Rightarrow r = 190/38 = 5\%$

55. (d)
56. (a) Price at which he wanted to sell

$$= 480\times\frac{(100+40)}{(100-40)}$$

$$= ₹\ \frac{480\times140}{60} = ₹1120$$

57. (b) Here, Speed of boat downstream,

$x=\frac{18}{4}=4.5$ km/h

and speed of boat upstream,

$y=\frac{18}{12}=1.5$ km/h

$\therefore$ Speed of stream

$=\frac{x-y}{2}=\frac{4.5-1.5}{2}=\frac{3}{2}=1.5$ km/h

58. (a) Ratio of A's and B's efficiency = 100 : 125 = 4 : 5

Ratio of time = 5 : 4

$\therefore$ Time taken by $B=\frac{6\times4}{5}=\frac{24}{5}=4\frac{4}{5}$ days

59. (c)
60. (d)

61. (b)	62. (a)	63. (d)	64. (b)	65. (c)
66. (c)	67. (d)	68. (b)	69. (b)	70. (a)
71. (c)	72. (c)	73. (b)	74. (b)	75. (d)
76. (c)	77. (c)	78. (b)	79. (a)	80. (c)
81. (d)	82. (a)	83. (b)	84. (b)	85. (a)
86. (c)	87. (a)	88. (c)	89. (c)	90. (b)
91. (b)	92. (b)	93. (b)	94. (a)	95. (a)
96. (d)	97. (c)	98. (b)	99. (d)	100. (b)