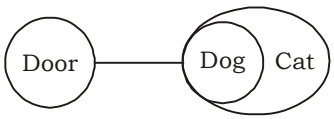
RRB MOCK TEST-1 (Solution)

1. (D) M(+)
   |
   N(–)——C(+)——F

2. (C) Wood is the odd one out because it is a material used to make table, chair and cupboard.

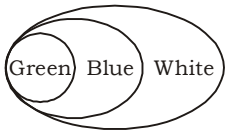
3. (B)

4. (D)



1. ✘ 2. ✘
3. ✓ 4. ✘

5. (A)



1. ✓ 3. ✘
2. ✓ 4. ✘

6. (A)

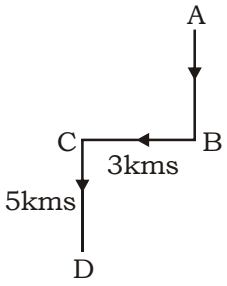
7. (A) The new letter sequence is E C N A B R U T S I D. Clearly, S comes after T

8. (A) Each letter of the word is moved four step back to decode it. So GEORGE will be CAKNCA

9. (C) Number of persons between Amrita and Mukul = 50 - (10 + 25) = 15. Since Mamta lies in middle of these 15 persons, so Mamta's position is 8th from Amrita i.e. 18th from the front.

10. (C)

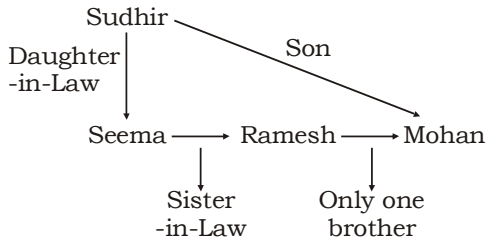
11. (D)



Hence required direction is South-West.

12. (A) This is a simple subtraction series. Each number is 35 less than the previous number.

13. (C)



14. (D)

15. (D)

16. (B) All except Eagle are flightless birds.

17. (C) Given Number – 7 3 4 6 2 8 5
    Ascending Order – 2 3 4 5 6 7 8

18. (C) (12 + 18 + 30)/10 = **6**,
    (16 + 24 + 40)/10 = **8**,
    Similarly, (45 + 18 + 27)/10 = **9**.

19. (C) As Ornithologist is a specialist of Birds. Similarly, Archealogist is a specialist of Archealogy.

20. (C) The correct order is :Key, Lock, Door, Room, Switch on i,e 1, 3, 2, 4, 5.

21. (A) Required sum = (80 – 3 × 3) years = (80 – 9) years = 71 years.

22. (A) The pattern is – 45, – 35, – 25, ...So, missing term = 20 – 15 = 5.

23. (A) N O P Q R S T U V W X Y Z M L K J I H G F E D C B A.
    required answer is (16 + 5) = 21th letter from your right is S.

24. (A) The fig. (X) is similar to the **Form I**. So, when the sheet shown in fig. (X) is folded to form a cube then one of the two half-shaded faces lies opposite to one of the blank faces and the other half-shaded face lies opposite to another blank face. The two remaining blank faces lie opposite to each other. Thus, both the cubes shown in figures (1) and (4) can be formed when the sheet shown in fig. (X) is folded. Also, though the cubes shown in figures (2) and (3) have faces that can appear adjacent to each other but the cube formed by folding the sheet in fig. (X) cannot be rotated to form either of the two. Hence, the cubes in figures (2) and (3) cannot be formed.

25. (A) By analysing the word LOGICAL, we can observe the logic used to code is

L	O	G	I	C	A	L
+2	+2	+2	+1	-2	-2	-2
N	Q	I	J	A	Y	J

Similarly by applying the same logic we can code FINANCE as HKPBLAC.

26. (C) Let the income of the family = ₹ 100

$\therefore$ Expenditure on food = $100 \times \frac{25}{100}$ = ₹ 25

After increase of 20% income

= $100 \times \frac{120}{100}$ = ₹ 120

According to the question,
Expenditure is same in both cases.

$\therefore$ % expenditure = $\frac{25}{120} \times 100 = \frac{250}{12}$

% expenditure = 20.833%
% decrease in expenditure = 25 – 20.833
= 4.16%

27. (D) P = ₹ 15600
R = 10%

for 2 yrs. S.I. = $\frac{15600 \times 10 \times 2}{100}$ = ₹ 3120

After 2nd yr. P = ₹ (15600 + 3120)
= ₹ 18720
R = 10%

For 2yr., S.I. = $\frac{18720 \times 10 \times 2}{100}$ = ₹ 3744

Required amount = ₹ (3120 + 3744)
= ₹ 6864

28. (C)

	Train		**Bus**		**Car**
Distance covered	4	:	3	:	2
Fair per km	1	:	2	:	4
Total fair =	4	:	6	:	8
	2	:	3	:	4

Train fair = $\frac{2}{2+3+4} \times 720$

= $\frac{2}{9} \times 720$ = ₹ 160

29. (B) 20% = $\frac{1}{5}$

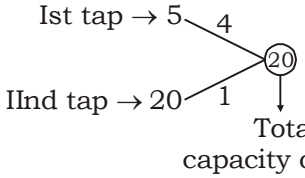
	Salesman A		Salesman B
CP ⟶	$5_{\times 5}$	:	$4_{\times 6}$
SP ⟶	$6_{\times 5}$	:	$5_{\times 6}$
Profit ⟶	$+1_{\times 5}$	:	$+1_{\times 6}$
	5	:	6

1 unit

1 unit = ₹ $\frac{3000}{30}$ = ₹ 100

Difference = 1 × 100 = ₹ 100

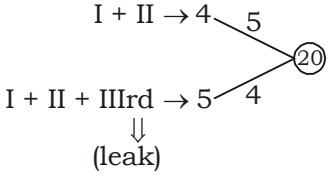
30. (B)



Time taken by both the taps to fill the tank

= $\frac{20}{5}$ = 4 hours

According to question,
When leak is open then total time = (4 + 1)
= 5 hours



Time taken by leak to empty the tank = $\frac{20}{1}$

= 20 hours

31. (A) Expression

= $\sqrt{8+\sqrt{57+\sqrt{38+\sqrt{108+\sqrt{169}}}}}$

= $\sqrt{8+\sqrt{57+\sqrt{38+\sqrt{108+13}}}}$

= $\sqrt{8+\sqrt{57+\sqrt{38+\sqrt{121}}}}$

= $\sqrt{8+\sqrt{57+\sqrt{38+11}}}$

= $\sqrt{8+\sqrt{57+\sqrt{49}}}$

= $\sqrt{8+\sqrt{57+7}}$ = $\sqrt{8+\sqrt{64}}$

= $\sqrt{8+8}$ = $\sqrt{16}$ = 4

32. (A) Taking LCM of 8, 5, 3 and 2 i.e. 120. than, multiplying every fraction by 120.

$\frac{3}{8} \times 120, \frac{3}{5} \times 120, \frac{2}{3} \times 120, \frac{1}{2} \times 120$

↓ 45 ↓ 72 ↓ 80 ↓ 60

80 > 72 > 60 > 45

80 i.e. $\frac{2}{3}$ is largest

33. (D) $\frac{\text{curved surface of cylinder}}{\text{curved surface of cone}} = \frac{8}{5}$

$\Rightarrow \frac{2\pi rh}{\pi r\sqrt{h^2+r^2}} = \frac{8}{5}$

$\Rightarrow \frac{h}{\sqrt{h^2+r^2}} = \frac{4}{5}$

On squaring both sides,

$\frac{h^2}{h^2+r^2} = \frac{16}{25} \Rightarrow \frac{h^2+r^2}{h^2} = \frac{25}{16}$

$\Rightarrow 1 + \frac{r^2}{h^2} = \frac{25}{16} \Rightarrow \frac{r^2}{h^2} = \frac{25}{16} - 1 = \frac{9}{16}$

$\therefore \frac{r}{h} = \frac{3}{4}$

34. (C) According to the question,

	Man	:	Woman	:	Girl
Efficiency →	6	:	3	:	1

money received by (woman + girl)

$= \frac{10000}{10} \times 4$

= ₹ 4000

35. (D) Since 90% of the total votes have been polled.
So, Let total votes A + B + C = 100%
(total vote polled i.e. 90% of the total votes)
According to the question :-
A – C = 18,000

But $A = \frac{3}{2}B$

B – C = 5%
So, B = 5% + C

and $A = \frac{3}{2}B = \frac{3}{2}(5\% + C)$

Now A + B + C = 100%

$\frac{3}{2}(5\% + C) + 5\% + C + C = 100\%$

after solving
⇒ C = 25%
⇒ B = 30%
⇒ A = 45%
Again A – C = 18,000
20% = 18,000
Total votes polled 100% = 90,000
Hence,

Total votes = $\frac{10}{9} \times 90{,}000 = 1{,}00{,}000$

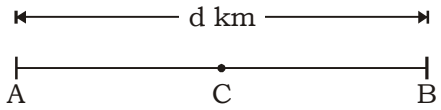
36. (C) Let the quantities of A & B are $4x$ and x respectively.
According to question

$$\frac{4x - 10 \times \frac{4}{5}}{x + 10 \times \frac{4}{5}} = \frac{2}{3}$$

$$\Rightarrow \frac{4x - 8}{x + 8} = \frac{2}{3}$$

$\Rightarrow x = 4$
So, quantity of liquid A in the jar
= 4 × 4 = 16 litre

37. (A)



Car 1 → 10 km/h

Car 2 → 8 km/hr + 8.5 km/h + 9 km/h ...
Ist hour IInd hour + ...
Let A is a point from where both the cars are moving toward the destination B, and C is a point where the car 2 overtakes the car 1.
Let after t hours the second car overtake the first car.
then equate the distance because both have travelled the same distance.
Distance covered by car 1 = distance covered by car 2

$10t = \frac{t}{2}[2 \times 8 + (t-1)\frac{1}{2}]$

$20 = 16 + \frac{t-1}{2}$

$t - 1 = 8 \Rightarrow t = 9$ hours
Distance covered by the first car in 9 hours
= 9 × 10 = 90 km
So after 90 km the second car will overtake the first car.

38. (A) C.I. for 2 years at 8% = 16.64%
Amount = ₹ 5832 = 116.64%

Principal = $\frac{5832}{116.64} \times 100$ = ₹ 5000

39. (B) Let the amount be ₹ x
∴ According to question,

$\frac{8}{3}x - \frac{3}{8}x = 55$

$\Rightarrow \frac{64x - 9x}{24} = 55$

$\Rightarrow \frac{55x}{24} = 55$ or, x = ₹ 24

40. (B) Relative speed = 63 – 3 = 60 km/hr

∴ Required time = $\frac{500 \times 18}{60 \times 5}$ = 30 sec

41. (D) First number × Second number
= HCF × LCM
⇒ 75 × Second number
= 15 × 225

$= \frac{15 \times 225}{75} = 45$

42. (A) Area of path = $x(l + b - x)$
= 5(60 + 40 – 5)

$= 5 \times 95 = 475\ m^2$

$\therefore$ Total cost $= 475 \times \frac{60}{100} = ₹\ 285$

43. (A) A single discount equal to the two successive discounts

$= \left(10 + 5 - \frac{10 \times 5}{100}\right)\% = 14.5\%$

$\therefore$ Selling price of the article
$= 85.5\%$ of ₹ 240

$= ₹\ \frac{85.5 \times 240}{100} = ₹\ 205.20$

44. (C) 101 + 102 + 103 + ... + 200
S = (100 + 1) + (100 + 2) + (100 + 3) + ... + (100 + 100)
Thus, it consists of 100 terms.
= (100 + 100 + 100 + ... 100 times) + (1 + 2 + 3 + ... + 100)
= (100 × 100) + (1 + 2 + 3 + ... + 100)

$= 10000 + \frac{100 \times (100 + 1)}{2}$

= 10000 + 5050 = 15050

45. (A) CP $= \frac{2400}{(100 + 25)} \times 100 = ₹\ 1920$

SP = ₹ 2040
Profit = 2040 – 1920 = ₹ 120

% profit $= \frac{120}{1920} \times 100 = 6.25\%$

46. (D) Sita's current age is $\frac{6}{5}$ times of her age at the time of her marriage which means her current age is 6 units and her age at the time of marrage was 5 units. But she got married 6 years ago which means 1 unit is equal to 6 years so her current age is 36 years and her son's age is $\frac{1}{12}$ of her current age i.e. 3 years.

47. (B) $\because$ ABCD is a cyclic quadrilateral.
$\therefore \angle C + \angle D = 180°$
$\Rightarrow \angle D = 180° - 48° = 132°$

48. (D) Let the amounts invested in 2014 in companies P and Q be Rs. $8x$ and Rs. $9x$ respectively.
Then, interest received after one year from Company P

$= ₹\ (6\%\ \text{of}\ 8x) = ₹\ \frac{48}{100}x$

and interest after one year from Company Q

$= ₹(4\%\ \text{of}\ 9x) = ₹\frac{36}{100}x.$

$\therefore$ Required ratio $= \left(\frac{\frac{48}{100}x}{\frac{36}{100}x}\right) = \frac{4}{3},$

49. (D) Let ₹ x lakhs be invested in Company P in 2012, then amount invested in Company Q in 2012 = ₹ $(30 - x)$ lakhs.
Total interest from the two Companies after 1 year
= ₹ [(7.5% of x) + (9% of $(30 - x)$] lakhs

$= ₹\ \left[27 - \left(\frac{1.5x}{100}\right)\right]$ lakhs

$\therefore \left[27 - \left(\frac{1.5x}{100}\right)\right] = 2.43 \Rightarrow x = 18.$

i.e., amount invested in Company P
= ₹18 lakhs.

50. (D) Difference = ₹ [(10% of 4.75) – (8% of 4.75)] lakhs.
= ₹ (2% of 4.75) lakhs = ₹ 0.095 lakhs
= ₹ 9500

RRB MOCK TEST-1 (ANSWER KEY)

1.	(D)	26.	(C)	51.	(B)
2.	(C)	27.	(D)	52.	(A)
3.	(B)	28.	(C)	53.	(B)
4.	(D)	29.	(B)	54.	(A)
5.	(A)	30.	(B)	55.	(B)
6.	(A)	31.	(A)	56.	(D)
7.	(A)	32.	(A)	57.	(A)
8.	(A)	33.	(D)	58.	(C)
9.	(C)	34.	(C)	59.	(A)
10.	(C)	35.	(D)	60.	(A)
11.	(D)	36.	(C)	61.	(B)
12.	(A)	37.	(A)	62.	(B)
13.	(C)	38.	(A)	63.	(C)
14.	(D)	39.	(B)	64.	(D)
15.	(D)	40.	(B)	65.	(B)
16.	(B)	41.	(D)	66.	(A)
17.	(C)	42.	(A)	67.	(D)
18.	(C)	43.	(A)	68.	(B)
19.	(C)	44.	(C)	69.	(D)
20.	(C)	45.	(A)	70.	(C)
21.	(A)	46.	(D)	71.	(A)
22.	(A)	47.	(B)	72.	(A)
23.	(A)	48.	(D)	73.	(B)
24.	(A)	49.	(D)	74.	(C)
25.	(A)	50.	(D)	75.	(B)

76. (A)
77. (D)
78. (B)
79. (B)
80. (D)
81. (C)
82. (B)
83. (A)
84. (C)
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