IBPS RRB PO Prelims 2023 Memory Based Question Paper, 6th Aug, All Shifts Download PDF (In English)

Direction: Read the following information carefully to answer the questions given below.

Nine people P, Q, R, S, T, U, V, W, and X have their joining in a particular company in different months i.e. January, February, May, June, July , September, October, November, and December of the same year but not necessarily in the same order. S has the joining before June, but not in the month which has more than 30 days. Four people have the joining between X and S. T has the joining after X. Three people have the joining between T and P. Two people have the joining between P and U. Two people have the joining between Q and R and both have the joining before T. R has the joining after P. V has the joining before W. W does not have the joining in the month which has 31 days.

1. How many people join between X and R?
A. One
B. Three
C. Four
D. None
E. Two

2.Who amongst the following joins at last?
A. Q
B. T
C. X
D. U
E. None of these

3.Who joins in the month having 30 days before R?
A. Q
B. W
C. P
D. S
E. None of these

4.Who amongst the following joins in September?
A. U
B. R
C. P
D. Q
E. T

5.Four of the following five are alike in the same way and hence form a group. Which amongst the following does not belong to that group?

A. W

B. V

C. Q

D. X

E. P

Direction: In the question below are given three statements followed by two conclusions which are numbered as I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

6. S**tatement:**

All Drop is Fresh

All Fresh is Water

Some Water is Cold

Conclusion:

I. All Drop being Cold is a possibility

II. No Drop is Cold

A. Only I follows

B. Only II follows

C. Either I or II follows

D. Both I and II follow

E. Neither I nor II follow

7. **Statement:**

Some Brush is Hair

No Hair is Rope

All Rope is Take

Conclusion:

I. Some Take is not Hair

II. Some Brush is not Rope

A. Only I follows

B. Only II follows

C. Either I or II follows

D. Both I and II follow

E. Neither I nor II follow

8.**Statement:**
Some Paint is feel
All Feel is Red
Some Feel is Bad
Conclusion:
I. Some Red is not Feel
II. No Bad is Paint
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Both I and II follow
E. Neither I nor II follow

9. **Statement:**
Only a few Snow is Cold
No Cold is Date
All Snow is Fog
Conclusion:
I. All Snow is Date
II. Some Snow is not Date
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Both I and II follow
E. Neither I nor II follow

10. **Statement:**
Only a few Snow is Cold
No Cold is Date
All Snow is Fog
Conclusion:
I. Some Fog is not Date
II. All Fog can be Date
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Both I and II follow
E. Neither I nor II follow

Direction: In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true, and then give your answers accordingly.

11. **Statement:**
F ≤ V = ≤ C; U > Y < T; C = D ≤ S < A; T > R > F;
Conclusion:
I. U > D
II. A > F
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Neither I nor II follows
E. Both I and II follow

12. **Statement:**
J ≥ N ≥ H; P > L < M; M < K = J; H = B > G = V;
Conclusion:
I. M < H
II. K > V
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Neither I nor II follows
E. Both I and II follow

13. **Statement:**
F ≥ G ≤ B; T > R > E; B = V ≤ C; E = D ≥ F;
Conclusion:
I. G < R
II. C > T
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Neither I nor II follows
E. Both I and II follow

14. **Statement:**
F = R ≤ E; T > G = B; E = D < C = X; B ≥ V ≤ F;
Conclusion:
I. G ≥ E
II. X > V
A. Only I follows
B. Only II follows
C. Either I or II follows
D. Neither I nor II follows
E. Both I and II follow

Direction: Study the following information carefully and answer the given questions.

There are seven people i.e. K, L, M, N, O, P and Q having different height. The height of second shortest person is 80 cm. Two people are shorter than M but taller than Q. P is taller than K but shorter than O. L is taller than N. N is shorter than Q but not the shortest person. M is taller than O but not the tallest person.

15. Who amongst the following is the second tallest person?
A. P
B. Q
C. L
D. M
E. None of these

16. If height of P is 110cm then what could be the height of Q?
A. 115cm
B. 93cm
C. 79cm
D. 60cm
E. 125cm

17. Number of people shorter then O is same as number of people taller than ____.
A. N
B. K
C. Q
D. P
E. None of the above

Direction: Study the following data carefully and answer the questions accordingly.

Six people i.e., A, B, C, D, E, and F live in a six-story building but not necessarily in the same order. One person lives on one floor. The ground floor is numbered 1 and the top floor is numbered 6. Each one of them likes different colors i.e. Grey, White, Black, Brown, Orange, and Red but not necessarily in the same order. Two people live between F and the one, who likes Brown. Three people live between the ones, who like Grey and Brown. Two people live between the one, who likes Grey and B. One person lives between E and B. The one, who likes Black lives above A, who lives above B. C lives below D. The one, who likes Orange, lives above the one, who likes Red and both lives on the even-numbered floors.

18. How many people live between D and A?
A. None
B. Three
C. More than three
D. One
E. Two

19.C likes which colour?
A. Grey
B. Red
C. White
D. Brown
E. None of these

20.Who lives on even numbered floor below B?
A. C
B. F
C. D
D. E
E. None of these

21.How many people live above the one who likes White?
A. Three
B. One
C. None
D. Two
E. Four

22.Who likes Orange colour?
A. E
B. A
C. D
D. B
E. None of these

Direction: Study the following information carefully and answer the question:
The table given below shows the average number of boys and girls in five schools, A, B, C, D and E. It also shows the number of girls in those schools.

School	Average of number of boys and girls	Number of girls
A	80	96
B	110	92
C	88	76
D	81	90
E	105	87

23. The number of boys in school D is what percent of the number of students in school A?
A. 30%
B. 54%
C. 32%
D. 45%
E. None of these

24. What is the ratio of number of boys in school A and B together to the total number of students in school C?
A. 10 : 7
B. 12 : 11
C. 5 : 4
D. 7 : 6
E. None of these

25. $33\frac{1}{3}\%$ of all the girls in school E participated in a cultural activity and 25% of boys in school D participated in that cultural activity. What is the difference between the number of girls in school E who participated in cultural activity and boys of school D who did not participate in a cultural activity?
A. 15
B. 29
C. 21
D. 11
E. 25

26. The average number of boys in school A, B and E is what percent more than the number of girls in school D?
A. $16\frac{2}{3}\%$
B. $33\frac{1}{3}\%$
C. 12.5%
D. 8%
E. 20%

27. If 25% students of school C received scholarship and the ratio of boys and girls who received scholarship is 5 : 6. What is number of boys of school C who have not received any scholarship?
A. 56
B. 80
C. 88
D. 64
E. 72

Direction: What should come in place of '?' in the following question.
28. 4, 9, 20, 35, 66, ?
A. 132
B. 119
C. 91
D. 68
E. 94

29.2560, 160, 20, 5, 2.5, ?
A. 5
B. −3
C. 0
D. 1
E. 2.5

30.The ratio of present age of A, B and C is 3 : 5 : 10. Four years hence, the age of B will be 50% more than the present age of D. If the average age of A, B and C is 24 years, find the difference between the present age of A and D.
A. 8 years
B. 2 years
C. 6 years
D. 3 years
E. 4 years

31.The radius of a solid right circular cylinder is equal to the radius of a semicircle. The area of semicircle is 308 cm^2. If the ratio of height and radius of cylinder is 3 : 2, find the curved surface area of cylinder.
A. 2132 cm^2
B. 1264 cm^2
C. 1848 cm^2
D. 1686 cm^2
E. None of these

32.A can finish a work in 48 days with 50% of his efficiency. B can do 20% of work in 8 days. The ratio of efficiency of A and C is 5 : 4. Find the time taken by A, B and C together to complete the work.
A. 10 days
B. 6 days
C. 7.5 days
D. 12.5 days
E. 14 days

33.In 80 litre mixture of milk and water the ratio of milk and water is 4 : 1. 20 litre of mixture was removed and then 24 litre milk and 12 litre water was added to the mixture. Find the percentage of water in the final mixture.
A. 16%
B. 25%
C. 30%
D. 20%
E. None of these

34. A can finish a work in 48 days. B is 50% more efficient than A. A and B start the work together worked X days then B left the work. The remaining work was done by A in 28 days. In how many days the complete work was finished?
A. 42
B. 30
C. 32
D. 36
E. 39

35. P invest Rs. X in business for 6 months. Q invest Rs. (X + 500) in the same business for 8 months. If the total profit obtained is Rs. 1320, and the profit obtained by B is 825, find the value of X.
A. 2400
B. 2000
C. 3000
D. 1800
E. None of these

Direction: Study the following information carefully and answer the question:
The pie chart given below shows the percentage distribution of all the tourists visiting a tourist place on four days, Monday, Tuesday, Wednesday and Thursday. Total number of tourists (males + females) = 1200
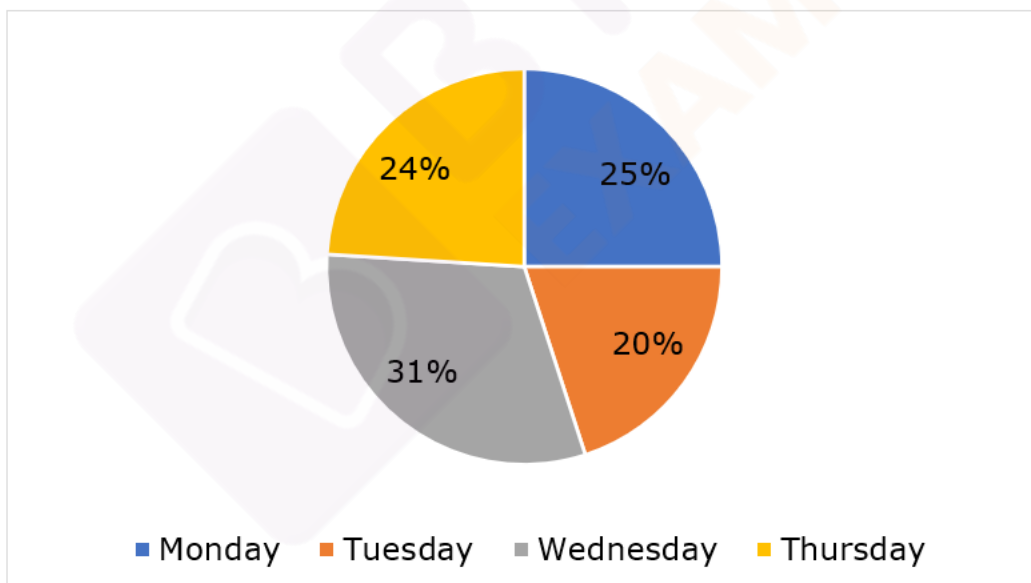
The pie chart given below shows the percentage distribution of female tourists visiting tourist place on four days, Monday, Tuesday, Wednesday and Thursday. Total number of female tourists = 700
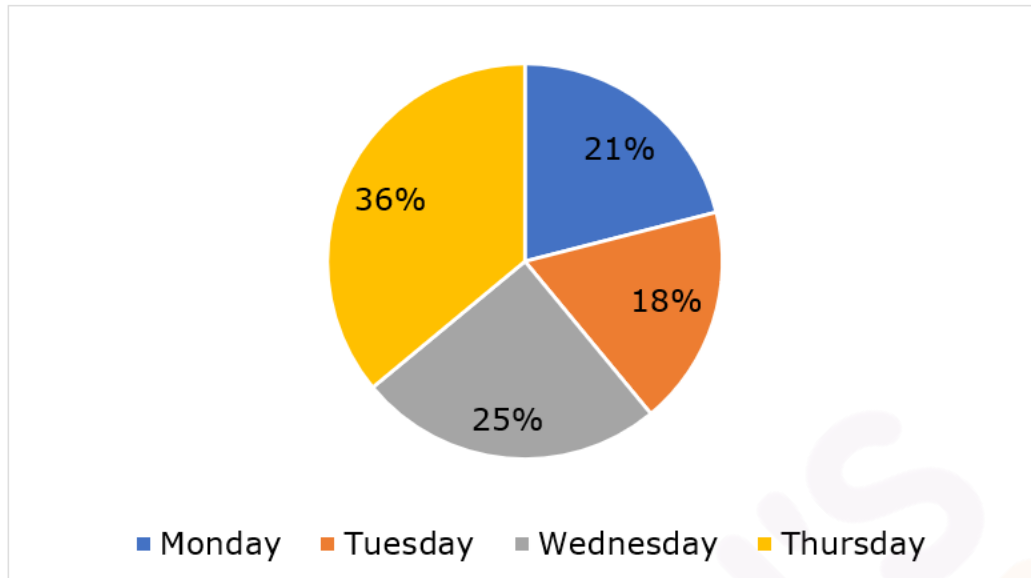
36. Find the ratio of number of male tourists on Tuesday to the male tourist on Thursday?
A. 13 : 8
B. 72 : 29
C. 7 : 3
D. 19 : 6
E. None of these

37.Number of male tourists on Wednesday are what percentage of total female tourists on all days?
A. 33.33%
B. 16.66%
C. 28.14%
D. 23%
E. 37.5%

38.What is the difference between the number of female tourists on Monday and the number of male tourists on Tuesday?
A. 50
B. 31
C. 23
D. 29
E. 33

39.If the number of female tourists on Friday is equal to 60% of number of female tourists on Wednesday and the number of male tourist on Friday is equal to average number of male tourists on Tuesday and Thursday, find the total number of tourists in Friday.

A. 180
B. 195
C. 140
D. 154
E. None of these

40.Find the average number of male tourists on all days?

A. 94
B. 125
C. 144
D. 137
E. 109

Direction: What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)

41. 59.99% of 449.89 + 74.97% of 120.07 = ? × 20.04

A. 18
B. 24
C. 30
D. 10
E. 6

42.463.99 ÷ 15.97 = $?^2 - \sqrt{(1944.95 - 720.03)}$

A. 20
B. 4
C. 8
D. 24
E. 13

ANSWERS

1. Ans. D.

Months	Persons
January	V
February	S
May	Q
June	W
July	P
September	R
October	X
November	U
December	T

2. Ans. B.

Months	Persons
January	V
February	S
May	Q
June	W
July	P
September	R
October	X
November	U
December	T

3. Ans. B.

Months	Persons
January	V
February	S
May	Q
June	W
July	P
September	R
October	X
November	U
December	T

4. Ans. B.

Months	Persons
January	V
February	S
May	Q
June	W
July	P
September	R
October	X
November	U
December	T

5. Ans. A.

Months	Persons
January	V
February	S
May	Q
June	W
July	P
September	R
October	X
November	U
December	T

W joins in the month having 30 days.

6. Ans. A.
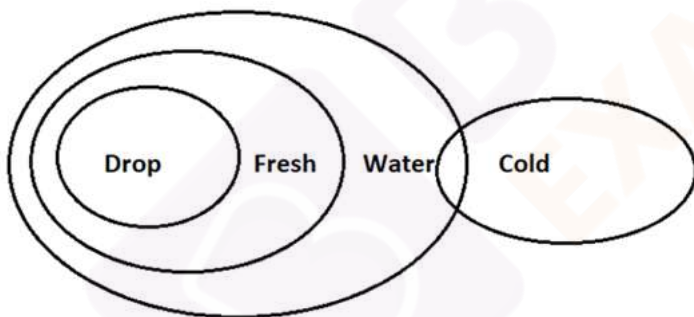
7. Ans. D.
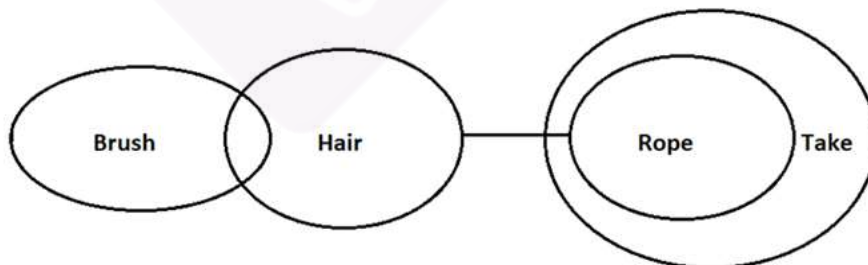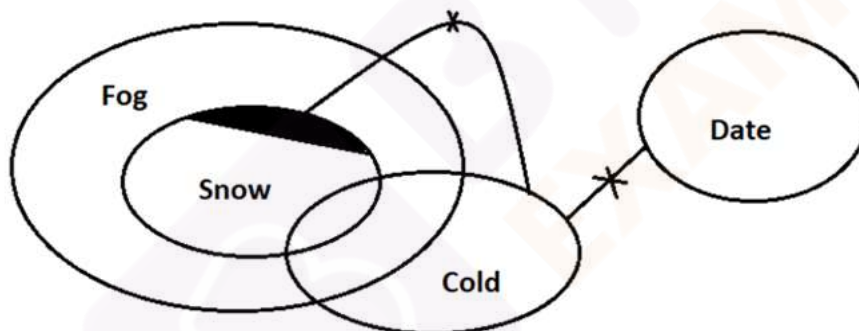
8. Ans. E.
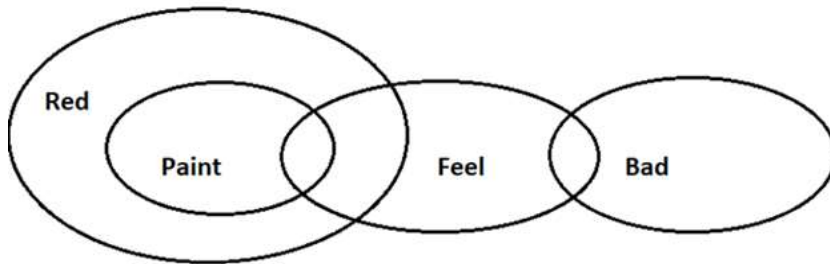
9. Ans. B.
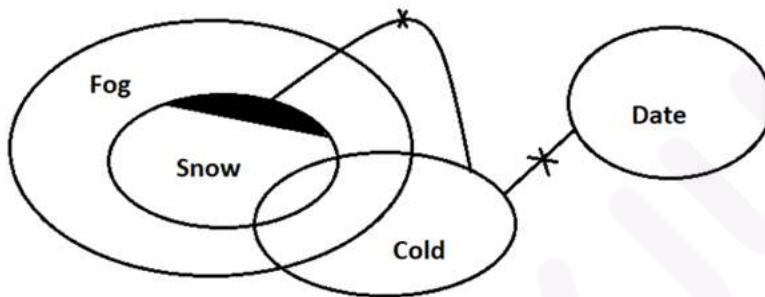
10. Ans. D.

11. Ans. B.
U > Y < T > R > F ≤ V = ≤ C = D ≤ S < A
Conclusion:
I. U > D false as U > Y < T > R > F ≤ V = ≤ C = D
II. A > F true as F ≤ V = ≤ C = D ≤ S < A
12. Ans. B.

P > L < M < K = J ≥ N ≥ H = B > G = V
Conclusion:
I. M < H false as M < K = J ≥ N ≥ H
II. K > V true as K = J ≥ N ≥ H = B > G = V

13. Ans. A.

T > R > E = D ≥ F ≥ G ≤ B = V ≤ C

Conclusion:

I. G < R true as R > E = D ≥ F ≥ G

II. C > T false as T > R > E = D ≥ F ≥ G ≤ B = V ≤ C

14. Ans. B.

Statement:

T > G = B ≥ V ≤ F = R ≤ E = D < C = X

Conclusion:

I. G ≥ E false as G = B ≥ V ≤ F = R ≤ E

II. X > V true as V ≤ F = R ≤ E = D < C = X

15. Ans. D.

1) Two people are shorter than M but taller than Q.

M > __ > __ > Q

2) P is taller than K but shorter than O.

O > P > K

3) L is taller than N.

L > N

4) N is shorter than Q but not the shortest person.

5) M is taller than O but not the tallest person.

L > M > O > P > Q > N > K

6) The height of second shortest person is 80 cm.

L > M > O > P > Q > N (80) > K

16. Ans. B.

1) Two people are shorter than M but taller than Q.

M > __ > __ > Q

2) P is taller than K but shorter than O.

O > P > K

3) L is taller than N.

L > N

4) N is shorter than Q but not the shortest person.

5) M is taller than O but not the tallest person.

L > M > O > P > Q > N > K

6) The height of the second shortest person is 80 cm.

L > M > O > P > Q > N (80) > K

17. Ans. C.

1) Two people are shorter than M but taller than Q.

M > __ > __ > Q

2) P is taller than K but shorter than O.

O > P > K

3) L is taller than N.

L > N

4) N is shorter than Q but not the shortest person.

5) M is taller than O but not the tallest person.

L > M > O > P > Q > N > K

6) The height of the second shortest person is 80 cm.
L > M > O > P > Q > N (80) > K

18. Ans. D.

6	E	Black
5	A	Brown
4	B	Orange
3	D	White
2	F	Red
1	C	Grey

19. Ans. A.

6	E	Black
5	A	Brown
4	B	Orange
3	D	White
2	F	Red
1	C	Grey

20. Ans. B.

6	E	Black
5	A	Brown
4	B	Orange
3	D	White
2	F	Red
1	C	Grey

21. Ans. A.

6	E	Black
5	A	Brown
4	B	Orange
3	D	White
2	F	Red
1	C	Grey

22. Ans. D.

6	E	Black
5	A	Brown
4	B	Orange
3	D	White
2	F	Red
1	C	Grey

23. Ans. D.

School	Total number of boys and girls	Number of girls	Number of boys
A	160	96	64
B	220	92	128
C	176	76	100
D	162	90	72
E	210	87	123

Required percentage = $\frac{72}{160} \times 100$ = 45%

24. Ans. B.

School	Total number of boys and girls	Number of girls	Number of boys
A	160	96	64
B	220	92	128
C	176	76	100
D	162	90	72
E	210	87	123

Number of boys in school A and B together = 64 + 128 = 192
Required ratio = 192 : 176 = 12 : 11

25. Ans. E.

School	Total number of boys and girls	Number of girls	Number of boys
A	160	96	64
B	220	92	128
C	176	76	100
D	162	90	72
E	210	87	123

Number of girls in school E who participated in cultural activity = $\frac{87}{3}$

= 29

Number of boys of school D who did not participate in a cultural activity = 75% of 72 = 54

Required difference = 54 − 29 = 25

26. Ans. A.

School	Total number of boys and girls	Number of girls	Number of boys
A	160	96	64
B	220	92	128
C	176	76	100
D	162	90	72
E	210	87	123

Total number of boys in school A, B and E = 64 + 128 + 123 = 315

Average number of boys in school A, B and E = $\frac{315}{3}$ = 105

Required percentage = $\frac{105-90}{90} \times 100 = 16\frac{2}{3}\%$

27. Ans. B.

School	Total number of boys and girls	Number of girls	Number of boys
A	160	96	64
B	220	92	128
C	176	76	100
D	162	90	72
E	210	87	123

Number of students in school C who received scholarship = $\frac{25}{100} \times 176 = 44$

Number of boys of school C who received scholarship = $\frac{5}{11} \times 44 = 20$

Number of boys of school C who have not received scholarship
= 100 − 20 = 80

28. Ans. C.

The pattern of the series is:

2 × 2 = 4

3 × 3 = 9

5 × 4 = 20

7 × 5 = 35

11 × 6 = 66

13 × 7 = 91

Hence, the missing number is 91.

29. Ans. E.

The pattern of the series is:

$2560 \div 16 = 160$

$160 \div 8 = 20$

$20 \div 4 = 5$

$5 \div 2 = 2.5$

$2.5 \div 1 = 2.5$

Hence, the missing number is 2.5.

30. Ans. E.

$3x + 5x + 10x = 24 \times 3$

$\Rightarrow 18x = 72$

$\Rightarrow x = 4$

Present age of B = 5×4 = 20 years

Age of B after 4 years = 20 + 4 = 24 years

Present age of A = 3×4 = 12 years

Present age of D = $\dfrac{24}{1.5}$ = 16 years

Required difference = 16 − 12 = 4 years

31. Ans. C.

Let the radius of semicircle be r cm.

$\dfrac{1}{2} \times \dfrac{22}{7} \times r^2 = 308$

$\Rightarrow r2 = 196$

$\Rightarrow r = 14$

So, radius of solid right circular cylinder = 14 cm

Height of cylinder = $\dfrac{14}{2} \times 3$ = 21 cm

Curved surface area of cylinder = $2 \times \dfrac{22}{7} \times 14 \times 21$ = 1848 cm²

32. Ans. A.

Number of days required by A = $\dfrac{48}{2}$ = 24

Number of days required by B = $\dfrac{8}{0.2}$ = 40

Let the total work be 120 units.

Efficiency of A = $\dfrac{120}{24}$ = 5 units/day

Efficiency of B = $\dfrac{120}{40}$ = 3 units/day

So, efficiency of C = 4 units/day

Required time = $\dfrac{120}{5+3+4}$ = 10 days

33. Ans. B.

Quantity of milk = $\dfrac{4}{5} \times 80$ = 64 litres

Quantity of water = 80 − 64 = 16 litres

Quantity of milk left when 20 litre of mixture is removed = $64 - \dfrac{4}{5} \times 20$ = 48 litres

Quantity of milk left when 20 litre of mixture is removed = $16 - \frac{1}{5} \times 20 = 12$ litres

Final quantity of milk = 48 + 24 = 72 litres
Final quantity of water = 12 + 12 = 24 litres
Percentage of water in the final mixture = $\frac{24}{72 + 24} \times 100 = 25\%$

34. Ans. D.
Let the total work be 48 units.
Efficiency of A = $\frac{48}{48}$ = 1 unit/day
Efficiency of B = 150% of 1 = 1.5 units
Work done by A in 28 days = 28 × 1 = 28 units
Work done by A and B together in X days = 48 – 28 = 20 units
X = $\frac{20}{1 + 1.5}$ = 8
Required number of days = 8 + 20 = 28

35. Ans. B.
Profit of A = 1320 – 825 = Rs. 495
$$\frac{6X}{8(X + 500)} = \frac{495}{825}$$
$$\Rightarrow \frac{3X}{4(X + 500)} = \frac{3}{5}$$
$$\Rightarrow 5X = 4X + 2000$$
$$\Rightarrow X = 2000$$

36. Ans. D.

Day	Number of tourists (male + female)	Number of female tourists	Number of male tourists
Monday	1200 × 0.25 = 300	700 × 0.21 = 147	300 – 147 = 153
Tuesday	1200 × 0.2 = 240	700 × 0.18 = 126	240 – 126 = 114
Wednesday	1200 × 0.31 = 372	700 × 0.25 = 175	372 – 175 = 197
Thursday	1200 × 0.24 = 288	700 × 0.36 = 252	288 – 252 = 36

Required ratio = 114 : 36
= 19 : 6

37. Ans. C.

Day	Number of tourists (male + female)	Number of female tourists	Number of male tourists
Monday	1200 × 0.25 = 300	700 × 0.21 = 147	300 – 147 = 153
Tuesday	1200 × 0.2 = 240	700 × 0.18 = 126	240 – 126 = 114
Wednesday	1200 × 0.31 = 372	700 × 0.25 = 175	372 – 175 = 197
Thursday	1200 × 0.24 = 288	700 × 0.36 = 252	288 – 252 = 36

Required percentage = $\frac{197}{700} \times 100 = 28.14\%$

38. Ans. E.

Day	Number of tourists (male + female)	Number of female tourists	Number of male tourists
Monday	1200 × 0.25 = 300	700 × 0.21 = 147	300 − 147 = 153
Tuesday	1200 × 0.2 = 240	700 × 0.18 = 126	240 − 126 = 114
Wednesday	1200 × 0.31 = 372	700 × 0.25 = 175	372 − 175 = 197
Thursday	1200 × 0.24 = 288	700 × 0.36 = 252	288 − 252 = 36

Required difference = 147 − 114 = 33

39. Ans. A.

Day	Number of tourists (male + female)	Number of female tourists	Number of male tourists
Monday	1200 × 0.25 = 300	700 × 0.21 = 147	300 − 147 = 153
Tuesday	1200 × 0.2 = 240	700 × 0.18 = 126	240 − 126 = 114
Wednesday	1200 × 0.31 = 372	700 × 0.25 = 175	372 − 175 = 197
Thursday	1200 × 0.24 = 288	700 × 0.36 = 252	288 − 252 = 36

Number of female tourists on Friday = $\frac{60}{100} \times 175 = 105$

Number of male tourists on Friday = $\frac{114+36}{2} = 75$

Total number of tourists on Friday = 105 + 75 = 180

40. Ans. B.

Day	Number of tourists (male + female)	Number of female tourists	Number of male tourists
Monday	1200 × 0.25 = 300	700 × 0.21 = 147	300 − 147 = 153
Tuesday	1200 × 0.2 = 240	700 × 0.18 = 126	240 − 126 = 114
Wednesday	1200 × 0.31 = 372	700 × 0.25 = 175	372 − 175 = 197
Thursday	1200 × 0.24 = 288	700 × 0.36 = 252	288 − 252 = 36

Number of male tourists on all days = 1200 − 700 = 500

Average number of male tourists on all days = $\frac{500}{4} = 125$

41. Ans. A.

59.99% of 449.89 + 74.97% of 120.07 = ? × 20.04

⇒ 60% of 450 + 75% of 120 ≈ ? × 20

⇒ $\frac{60}{100} \times 450 + \frac{75}{100} \times 120$ ≈ ? × 20

⇒ 270 + 90 ≈ ? × 20

⇒ ? = $\frac{360}{20}$ = 18

Hence, option A is correct.

42. Ans. C.

$463.99 \div 15.97 = ?^2 - \sqrt{(1944.95 - 720.03)}$

$\Rightarrow 464 \div 16 = ?^2 - \sqrt{1945 - 720}$

$\Rightarrow 29 = ?^2 - \sqrt{1225}$

$\Rightarrow 29 = ?^2 - 35$

$\Rightarrow ?^2 = 29 + 35 = 64$

$\Rightarrow ? = 8$

Hence, option C is correct.

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