## IBPS RRB PO Prelims 2023 Memory Based Question Paper, 5th Aug, All Shifts Download PDF (In English)

Direction (1-5): Read the information carefully and answer the question given below.

Eight people A, B, C, D, E, F, G and H are sitting around a circular table. Some of them are facing towards the center of the table while some are facing towards the outside the table. All the information is not necessarily in the same order. B sits second to the right of $G$. Two people sit between $B$ and $A$ who face inside the circular table. A does not sit adjacent to G. H sits second to the right of A. Two people sit between $H$ and $C$. C sits second to the left of $F$. $E$ sits second to the right of $D$ who does not sit adjacent to $G$. Immediate neighbours of $D$ face opposite direction to D . Immediate neighbours of G face opposite direction to G .

1. Who sits third to the right of $E$ ?
A. D
B. $F$
C. A
D. C
E. None of these
2. How many people sit between $G$ and $C$ when counted from the left of $C$ ?
A. Three
B. One
C. None
D. Two
E. Four
3. What is the direction of $B$ with respect to $H$ ?
A. Immediate left
B. Immediate right
C. Third to the left
D. Second to the right
E. None of these
4. Four of the following five are alike in a certain way and hence form a group. Which amongst the following does not belong to that group?
A. C
B. B
C. H
D. G
E. F
5. If E faces towards the inside of the circle, then who sits in the second right position from $E$ ?
A. H
B. D
C. C
D. G
E. None of these

Direction (6-10): Study the following information carefully and answer the given questions.

Eight people i.e. P, Q, R, S, T, U, V, and W were born in different years i.e. 1981, 1989, 1991, 1994, 1997, 1998, 2004, and 2005 but not necessarily in the same order. Consider the base year as 2021.

Age of $V$ is an odd number. The difference between the age of $V$ and $P$ is 13 . The number of people who were born after $P$ is the same as the number of people who were born before $U$. Four people were born between $R$ and $U$. Two people were born between $R$ and $Q$. Difference between the age of $Q$ and $T$ is 9 . $W$ is younger than Q .
6. How many people were born between W and P ?
A. Two
B. Six
C. Three
D. Five
E. None of these

7. What is the sum of the ages of $Q$ and $R$ ?
A. 39
B. 53
C. 45
D. 67
E. None of these
8. How many people were born after W?
A. One
B. None
C. Two
D. More than three
E. Three
9. What is the difference between the ages of $V$ and $T$ ?
A. 16
B. 5
C. 24
D. 7
E. None of these
10. Number of people were born after Q is same as number of people were born before $\qquad$ .
A. S
B. V
C. R
D. $T$
E. None of these


Direction (11-13): Study the following information carefully and answer the given questions.
A certain number of people are sitting in a straight line facing the north direction. $D$ sits third to the left of $H$. Six people sit between $H$ and $A$. Three people sit between $A$ and $K$ who sits at one of the ends of the row. Number of people sit between $K$ and $H$ is same as number of people sit between $H$ and $E$. $E$ sits third to the left of $B$. Five people sit between $B$ and $C$. $B$ sits in third position from one of the ends.
11. What is the number of people in the row?
A. 21
B. 20
C. 28
D. 18
E. None of these
12. How many people sit between $D$ and $B$ ?
A. 6
B. 11
C. 18
D. 16
E. None of these
13. Number of people sit between $K$ and $D$ are same as number of people sit between $\qquad$ and $\qquad$ .
A. B and C
B. D and H
C. H and C
D. C and B
E. None of these

Direction (14-18): Study the following information carefully and answer the questions given below.

Seven boxes i.e., A, B, C, D, E, F and G arrived from different countries i.e., China, Argentina, Serbia, Austria, Switzerland, Germany and Spain are placed one above another. All the information is but not necessarily in the same order. Three boxes are kept between Box $D$ and the box arrived from Argentina. Box $C$ is placed just above Box D. Three boxes are placed between Box $C$ and the box arrived from Austria. Only one boxes are placed between the box arrived from Austria and Box A. Box A neither placed at top position not at bottom position. Three boxes are placed between box A and Box G. Box E arrived from China. The box arrived from Germany is placed just above the box arrived from Serbia. Box C does not arrived from Germany. Two boxes are placed between Box B and the box arrived from Switzerland.
14. How many boxes are placed below the box arrived from Switzerland?
A. Four
B. Three
C. One
D. Two
E. None of these
15. Number of box placed above $A$ is same as number of box placed below $\qquad$ .
A. B
B. $F$
C. E
D. C
E. None of these
16. How many boxes are placed above the box arrived from Spain?
A. Three
B. More than three
C. One
D. None
E. Two

17. How many boxes are placed between Box $F$ and the box arrived from China?
A. Three
B. One
C. Two
D. None
E. Four
18. Which of the following box arrived from Spain?
A. B
B. D
C. A
D. C
E. None of these
19. Statement:

Some Double is Gang
All Gang is Ink
Some Ink is jet
Conclusion:
I. No Gang is Get
II. A few Jet is Gang
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
20.

Statement:
Some Cloud is Max


Only a few Max is Smoke
All Smoke is Dark
Conclusion:
I. Some Max can never be Dark
II. All Cloud can be Dark
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 (21-25): Study the following data carefully and answer the questions accordingly.

Eight people P, Q, R, S, T, U, V, and W live in an eight-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 8 . U lives above Q. P live above S. One person lives between Q and W. T lives on the fifth floor. Three people live between R and P . S lives on an odd-numbered floor. Three people live between W and T.
21. How many people live above $T$ ?
A. Two
B. Four
C. One
D. Three
E. None
22. How many people live between $W$ and $S$ ?
A. Three
B. Four
C. More than four
D. Two
E. One

23. Who amongst the following lives on odd numbered floor above $T$ ?
A. R
B. S
C. V
D. Q
E. None of these
24. Who lives on floor numbered as 3 ?
A. V
B. $R$
C. Q
D. W
E. None of these
25. U lives on floor numbers as $\qquad$ _.
A. 6
B. 3
C. 5
D. 4
E. 1

Direction (26-30): In the following number series, only one number is wrong. Find out the wrong number.
26. $3072,192,24,6,3,2$
A. 3072
B. 192
C. 2
D. 24


## E. 6

27. 197, 205, 196, 260, 235, 461
A. 205
B. 196
C. 260
D. 461
E. 235
28. $142,132,136,130,138,128$
A. 142
B. 128
C. 130
D. 132
E. 138
29. $31,64,130,262,528,1054$
A. 31
B. 528
C. 64
D. 262
E. 1054
30. $271,290,307,322,335,350$
A. 290
B. 350
C. 271
D. 322
E. 307

Direction (31-33): 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.)
31. $54.05 \times 24.02 \div 17.98+\sqrt{785}=? \times 4.99$
A. 20
B. 24
C. 8

D. 14
E. 44
32. $23.95 \times 25.02+164.09=?^{2}-135.93$
A. 39
B. 20
C. 42
D. 24
E. 30
33. $55.07 \%$ of $799=?-287.96 \div 24.02 \times(4.03)^{2}$
A. 674
B. 572
C. 632
D. 541
E. 520
\# \# \#COMMON\# \# \#9\# \# \# 13\# \# \#Direction (): Study the following information carefully and answer the question:

The table given below shows the number of rooms and number of vacant rooms in five building $A, B, C, D$ and $E$

| Building | Number of rooms | Number of vacant <br> rooms |
| :---: | :---: | :---: |
| A | 240 | 117 |
| B | 275 | 150 |
| C | 180 | 75 |
| D | 320 | 104 |
| E | 210 | 138 |

34. Number of occupied rooms in building $D$ is by what percent more than the number of rooms in building C ?
A. $12.5 \%$
B. $25 \%$
C. $16.66 \%$
D. $20 \%$


## E. None of these

35. What is the ratio of the average number of occupied rooms in buildings $A, C$ and $E$ to the number of vacant rooms in building $B$ ?
A. $8: 11$
B. $7: 6$
C. $2: 3$
D. $4: 5$
E. None of these
36. Total number of occupied rooms in buildings $B$ and $C$ is what percentage of the total number of rooms in buildings $C$ and $D$ ?
A. $46 \%$
B. $54 \%$
C. $36 \%$
D. $62 \%$
E. $35 \%$
37. What is the difference between the average number of vacant rooms in building $A, B \& C$ and the average number of vacant rooms in building $D$ and $E$ ?
A. 14
B. 13
C. 7
D. 4
E. None of these
38. Among the vacant rooms in building $E$, the ratio of the number of rooms having whitewash to the number of rooms without whitewash is 14
: 9 and $25 \%$ of the occupied room in the same building are without whitewash. How many rooms in building $E$ have whitewash?
A. 102
B. 138
C. 121
D. 143
E. None of these


Direction: Study the following information carefully and answer the question:

The bar graph given below shows the number of vegetarian and nonvegetarian person in four colonies, $P, Q, R$ and $S$.

39. What is the ratio of total number of vegetarian persons in colony $P$ and $Q$ together to the number of non-vegetarian person in colony $R$ and S?
A. $9: 7$
B. $4: 3$
C. $8: 7$
D. $17: 13$
E. None of these
40. Number of vegetarian persons in colony $T$ is $15 \%$ less the number of non-vegetarian persons in colony Q and the ratio of number of nonvegetarian person in colony T to the number of vegetarian persons in colony R is $8: 9$. What is the total number of persons in colony T ?
A. 496
B. 606
C. 449
D. 592
E. None of these

41. What is the difference between the average number of vegetarian persons in colony $\mathrm{Q}, \mathrm{R}, \mathrm{S}$ and the number of non-vegetarian persons in colony Q ?
A. 7
B. 10
C. 24
D. 15
E. 13
42. The ratio of number of males to females among the vegetarian person in colony Q is $7: 5$ and the number of non-vegetarian females in colony Q is $20 \%$ less the number of vegetarian males in the same colony. Find the number of non-vegetarian males in colony Q .
A. 208
B. 232
C. 174
D. 196
E. None of these
43. Number of vegetarian persons in colony $S$ is by what percent more than the number of non-vegetarian persons in colony P ?
A. $120 \%$
B. $150 \%$
C. $96 \%$
D. $80 \%$
E. None of these

Direction (44-46): In the following question two equations are given in variables $x$ and $y$. You have to solve these equations and determine the relation between $x$ and $y$.
44. I. $x^{2}-20 x+96=0$
II. $2 y^{2}-13 y+20=0$
A. $x>y$
B. $x \leq y$
C. $x<y$
D. $x \geq y$

E. $x=y$ or relationship between $x$ and $y$ can't be established
45. I. $2 x^{2}+15 x+28=0$
II. $3 y^{2}+10 y+8=0$
A. $x>y$
B. $x \leq y$
C. $x<y$
D. $x \geq y$
E. $x=y$ or relationship between $x$ and $y$ can't be established
46. I. $x^{2}-17 x+66=0$
II. $y^{2}-11 y+30=0$
A. $x>y$
B. $x \leq y$
C. $x<y$
D. $x \geq y$
E. $x=y$ or relationship between $x$ and $y$ can't be established
47. Monika marked the price of a book Rs. 360 above the cost price and sold it after giving a discount of $25 \%$ and made a profit of $12.5 \%$. Find the selling price of the book.
A. Rs. 810
B. Rs. 720
C. Rs. 1080
D. Rs. 960
E. None of these
48. Manisha and Ashi invested Rs. 16000 each in two different schemes offering simple interest of $12 \%$ p.a. and $15 \%$ p.a. respectively. If Manisha invested her money for 25 months while Ashi invested his money for 30 months, then find the difference between interest earned by Manisha and Ashi.
A. Rs. 1600
B. Rs. 2400
C. Rs. 2000

D. Rs. 1500
E. None of these
49. The perimeter of a square is 12 cm less than the perimeter of a rectangle. If the ratio of the length to breadth of the rectangle is $7: 5$ and the area of the square is $441 \mathrm{~cm}^{2}$, find the area of the rectangle.
A. $360 \mathrm{~cm}^{2}$
B. $420 \mathrm{~cm}^{2}$
C. $630 \mathrm{~cm}^{2}$
D. $560 \mathrm{~cm}^{2}$
E. None of these
50. In the question, Quantity I and Quantity II are given. You have to solve both the Quantity to establish the correct relation between Quantity-I and Quantity-II and choose the correct option.

Quantity I: The value of $x$, if $120 \%$ of $x$ is 15 more than the $12 \%$ of 75 .
Quantity II: The value of $a$, if $a^{2}-14 a-120=0$
A. Quantity-I > Quantity-II
B. Quantity-I < Quantity-II
C. Quantity-I $\leq$ Quantity-II
D. Quantity-I $\geq$ Quantity-II
E. Quantity-I = Quantity-II or No relation


## ANSWERS

1. Ans. B.

2. Ans. A.

3. Ans. C.

4. Ans. C.


H is facing outside the circle.


## 5. Ans. B.


6. Ans. D.

| Age | Year | People |
| :---: | :---: | :---: |
| 40 | 1981 | P |
| 32 | 1989 | T |
| 30 | 1991 | R |
| 27 | 1994 | V |
| 24 | 1997 | S |
| 23 | 1998 | Q |
| 17 | 2004 | W |
| 16 | 2005 | U |

7. Ans. B.

| Age | Year | People |
| :---: | :---: | :---: |
| 40 | 1981 | P |
| 32 | 1989 | T |
| 30 | 1991 | R |
| 27 | 1994 | V |
| 24 | 1997 | S |
| 23 | 1998 | Q |
| 17 | 2004 | W |
| 16 | 2005 | U |

## 8. Ans. A.

| Age | Year | People |
| :---: | :---: | :---: |
| 40 | 1981 | P |
| 32 | 1989 | T |
| 30 | 1991 | R |
| 27 | 1994 | V |
| 24 | 1997 | S |
| 23 | 1998 | Q |
| 17 | 2004 | W |
| 16 | 2005 | U |

9. Ans. B.

| Age | Year | People |
| :---: | :---: | :---: |
| 40 | 1981 | P |
| 32 | 1989 | T |
| 30 | 1991 | R |
| 27 | 1994 | V |
| 24 | 1997 | S |
| 23 | 1998 | Q |
| 17 | 2004 | W |
| 16 | 2005 | U |

10. Ans. C.

| Age | Year | People |
| :---: | :---: | :---: |
| 40 | 1981 | P |
| 32 | 1989 | T |
| 30 | 1991 | R |
| 27 | 1994 | V |
| 24 | 1997 | S |
| 23 | 1998 | Q |
| 17 | 2004 | W |
| 16 | 2005 | U |

11. Ans. C.

12. Ans. D.

13. Ans. C.

14. Ans. D.

| Box | Country |
| :---: | :---: |
| F | Austria |
| B | Argentina |
| A | Spain |
| E | China |
| C | Switzerland |
| D | Germany |
| G | Serbia |

15. Ans. D.

| Box | Country |
| :---: | :---: |
| F | Austria |
| B | Argentina |
| A | Spain |
| E | China |
| C | Switzerland |
| D | Germany |
| G | Serbia |

16. Ans. E.

| Box | Country |
| :---: | :---: |
| F | Austria |
| B | Argentina |
| A | Spain |
| E | China |
| C | Switzerland |
| D | Germany |
| G | Serbia |

17. Ans. C.

| Box | Country |
| :---: | :---: |
| F | Austria |
| B | Argentina |
| A | Spain |
| E | China |
| C | Switzerland |
| D | Germany |
| G | Serbia |

18. Ans. C.

| Box | Country |
| :---: | :---: |
| F | Austria |
| B | Argentina |
| A | Spain |
| E | China |
| C | Switzerland |
| D | Germany |
| G | Serbia |

19. Ans. C.

20. Ans. B.

21. Ans. D.

| 8 | P |
| :--- | :--- |
| 7 | S |
| 6 | U |
| 5 | T |
| 4 | R |
| 3 | Q |
| 2 | V |
| 1 | W |

22. Ans. C.

| 8 | P |
| :--- | :--- |
| 7 | S |
| 6 | U |
| 5 | T |
| 4 | R |
| 3 | Q |
| 2 | V |
| 1 | W |


23. Ans. B.

| 8 | P |
| :--- | :--- |
| 7 | S |
| 6 | U |
| 5 | T |
| 4 | R |
| 3 | Q |
| 2 | V |
| 1 | W |

24. Ans. C.

| 8 | P |
| :--- | :--- |
| 7 | S |
| 6 | U |
| 5 | T |
| 4 | R |
| 3 | Q |
| 2 | V |
| 1 | W |

25. Ans. A.

| 8 | P |
| :--- | :--- |
| 7 | S |
| 6 | U |
| 5 | T |
| 4 | R |
| 3 | Q |
| 2 | V |
| 1 | W |

26. Ans. C.

The pattern of the series is:
$3072 \div 16=192$
$192 \div 8=24$
$24 \div 4=6$
$6 \div 2=3$
$3 \div 1=3$
So, the wrong number is 2 .
27. Ans. D.

The pattern of the series is:
$197+2^{3}=205$
$205-3^{2}=196$
$196+4^{3}=260$
$260-5^{2}=235$
$235+6^{3}=451$
So, the wrong number is 461 .
28. Ans. A.

The pattern of the series is:
$134-2=132$
$132+4=136$
$136-6=130$
$130+8=138$
$138-10=128$


So, the wrong number is 142 .
29. Ans. B.

The pattern of the series is:
$31 \times 2+2=64$
$64 \times 2+2=130$
$130 \times 2+2=262$
$262 \times 2+2=526$
$526 \times 2+2=1054$
So, the wrong number is 528.
30. Ans. B.

The pattern of the series is:
$271+19=290$
$290+17=307$
$307+15=322$
$322+13=335$
$335+11=346$
So, the wrong number is 350 .
31. Ans. A.
$54.05 \times 24.02 \div 17.98+\sqrt{785}=? \times 4.99$
$\Rightarrow 54 \times 24 \div 18+28=? \times 5$
$\Rightarrow 72+28=? \times 5$
$\Rightarrow 100=? \times 5$
$\Rightarrow$ ? $=20$

Hence, option A is correct.
32. Ans. E.
$23.95 \times 25.02+164.09=?^{2}-135.93$
$\Rightarrow 24 \times 25+164=?^{2}-136$
$\Rightarrow 600+164=?^{2}-136$
$\Rightarrow 764+136=?^{2}$
$\Rightarrow ?^{2}=900$
$\Rightarrow ?=30$
Hence, option E is correct.
33. Ans. C.
$55.07 \%$ of $799=?-287.96 \div 24.02 \times(4.03)^{2}$
$55 \%$ of $800=?-288 \div 24 \times 4^{2}$
$\Rightarrow 55 \times 8=?-12 \times 16$
$\Rightarrow 440=?-192$
$\Rightarrow ?=440+192=632$
Hence, option C is correct.
34. Ans. D.

| Building | Number of <br> rooms | Number of <br> vacant rooms | Number of <br> Occupied <br> rooms |
| :---: | :---: | :---: | :---: |
| A | 240 | 117 | 123 |
| B | 275 | 150 | 125 |
| C | 180 | 75 | 105 |
| D | 320 | 104 | 216 |
| E | 210 | 138 | 72 |

Required percentage $=\frac{\frac{216-180}{180} \times 100}{}=20 \%$

35. Ans. C.

| Building | Number of <br> rooms | Number of <br> vacant rooms | Number of <br> Occupied <br> rooms |
| :---: | :---: | :---: | :---: |
| A | 240 | 117 | 123 |
| B | 275 | 150 | 125 |
| C | 180 | 75 | 105 |
| D | 320 | 104 | 216 |
| E | 210 | 138 | 72 |

Average number of occupied rooms in buildings $A, C$ and $E=\frac{\frac{123+1}{3}}{3}=$ 100

Required ratio $=100: 150$
$=2: 3$
36. Ans. A.

| Building | Number of <br> rooms | Number of <br> vacant rooms | Number of <br> Occupied <br> rooms |
| :---: | :---: | :---: | :---: |
| A | 240 | 117 | 123 |
| B | 275 | 150 | 125 |
| C | 180 | 75 | 105 |
| D | 320 | 104 | 216 |
| E | 210 | 138 | 72 |

Required percentage $=\frac{125+105}{180+320} \times 100=46 \%$
37. Ans. C.

| Building | Number of <br> rooms | Number of <br> vacant rooms | Number of <br> Occupied <br> rooms |
| :---: | :---: | :---: | :---: |
| A | 240 | 117 | 123 |
| B | 275 | 150 | 125 |
| C | 180 | 75 | 105 |
| D | 320 | 104 | 216 |
| E | 210 | 138 | 72 |

Average number of vacant rooms in building $A, B$ and $C=\frac{117+150+75}{3}=$ 114

Average number of vacant rooms in building $D$ and $E=\frac{104+138}{2}=121$ Required difference $=121-114=7$
38. Ans. B.

| Building | Number of <br> rooms | Number of <br> vacant rooms | Number of <br> Occupied <br> rooms |
| :---: | :---: | :---: | :---: |
| A | 240 | 117 | 123 |
| B | 275 | 150 | 125 |
| C | 180 | 75 | 105 |
| D | 320 | 104 | 216 |
| E | 210 | 138 | 72 |

Required answer $=\frac{14}{23} \times 138+\frac{75}{100} \times 72=138$
39. Ans. D.

Required ratio $=(270+240):(210+180)$
$=510: 390$
$=17: 13$
40. Ans. D.

Number of vegetarian persons in colony $T=\frac{85}{100} \times 320=272$
Number of non-vegetarian person in colony $T=\frac{360}{9} \times 8=320$
Total number of persons in colony $\mathrm{T}=272+320=592$
41. Ans. B.

Average number of vegetarian persons in colony $\mathrm{Q}, \mathrm{R}, \mathrm{S}=\frac{\frac{240+360+330}{3}}{3}$

$=310$
Required difference $=320-310=10$
42. Ans. A.

Number of vegetarian males in colony $Q=\frac{7}{12} \times 240=140$
Number of non-vegetarian females in colony $Q=80 \%$ of $140=112$
Number of non-vegetarian males in colony Q = 320-112 = 208
43. Ans. A.

Required percentage $=\frac{\frac{330-150}{150} \times 100}{=} 120 \%$
44. Ans. A.
I. $x^{2}-20 x+96=0$
$\Rightarrow \mathrm{x}^{2}-12 \mathrm{x}-8 \mathrm{x}+96=0$
$\Rightarrow x(x-12)-8(x-12)=0$
$\Rightarrow(x-12)(x-8)$
$\Rightarrow x=12,8$
II. $2 y^{2}-13 y+20=0$
$\Rightarrow 2 y^{2}-8 y-5 y+20=0$
$\Rightarrow 2 y(y-4)-5(y-4)=0$
$\Rightarrow(y-4)(2 y-5)=0$
$\Rightarrow y=4,5 / 2$
Hence, $x$ > $y$.
45. Ans. C.
I. $2 x^{2}+15 x+28=0$

$\Rightarrow 2 x^{2}+8 x+7 x+28=0$
$\Rightarrow 2 x(x+4)+7(x+4)=0$
$\Rightarrow(x+4)(2 x+7)=0$
$\Rightarrow x=-4,-7 / 2$
II. $3 y^{2}+10 y+8=0$
$\Rightarrow 3 y^{2}+6 y+4 y+8=0$
$\Rightarrow 3 y(y+2)+4(y+2)=0$
$\Rightarrow(y+2)(3 y+4)=0$
$\Rightarrow y=-2,-4 / 3$
Hence, $x<y$.
46. Ans. D.
I. $x^{2}-17 x+66=0$
$\Rightarrow x^{2}-11 x-6 x+66=0$
$\Rightarrow x(x-11)-6(x-11)=0$
$\Rightarrow(\mathrm{x}-11)(\mathrm{x}-6)$
$\Rightarrow x=11,6$
II. $y^{2}-11 y+30=0$
$\Rightarrow y^{2}-5 y-6 y+30=0$
$\Rightarrow y(y-5)-6(y-5)=0$
$\Rightarrow(y-5)(y-6)=0$
$\Rightarrow y=5,6$
So, $x \geq y$.
47. Ans. A.

Let the cost price of the book = Rs. x
Marked price of the book $=$ Rs. $(x+360)$
According to the question,
$\Rightarrow x \times 112.5 \%=(x+360) \times 75 \%$
$\Rightarrow 1.125 x=0.75 x+270$
$\Rightarrow 0.375 x=270$
$\Rightarrow \mathrm{x}=720$
Marked price of the book $=720+360=$ Rs. 1080
Selling price of the book $=1080 \times 0.75=$ Rs. 810
Hence, option A is correct.
48. Ans. C.

Interest received by Manish $=\frac{16000 \times 12 \times 25}{12 \times 100}$
$=$ Rs. 4000
Interest received by Ashi $=\frac{16000 \times 15 \times 30}{12 \times 100}$
=Rs. 6000
Required difference $=6000-4000=$ Rs. 2000
Hence, option C is correct.
49. Ans. D.

Let the length of the rectangle be 7 xcm .
The breadth of the rectangle $=5 x \mathrm{~cm}$
Area of the square $=441 \mathrm{~cm}^{2}$
Side of the square $=\sqrt{441}=21 \mathrm{~cm}$
Perimeter of the square $=21 \times 4=84 \mathrm{~cm}$


Perimeter of the rectangle $=84+12=96 \mathrm{~cm}$
$2(7 x+5 x)=96$
$\Rightarrow 2 \times 12 x=96$
$\Rightarrow x=4$

The length of the rectangle $=7 \times 4=28 \mathrm{~cm}$
The breadth of the rectangle $=5 \times 4=20 \mathrm{~cm}$
Area of the rectangle $=20 \times 28=560 \mathrm{~cm}^{2}$
Hence, option D is correct.
50. Ans. D.

Quantity I:
According to the question,
$120 \%$ of $x-15=12 \%$ of 75
$\Rightarrow 1.2 x-15=9$
$\Rightarrow 1.2 x=24$
$\Rightarrow x=20$
Quantity II:
Given, $a^{2}-14 a-120=0$
$\Rightarrow a^{2}-20 a+6 a-120=0$
$\Rightarrow a(a-20)+6(a-20)=0$
$\Rightarrow(\mathrm{a}-20)(\mathrm{a}+6)=0$
$\Rightarrow a=20,-6$

So, Quantity-I $\geq$ Quantity-II
Therefore, option D is correct.


