IBPS RRB Clerk Prelims Memory Based Questions 14th August 2021 (With Solution)

1. **Direction:** What should come in place of the question mark '?' in the following question?

150% of 220 × ? + 240 = 900

A. 4

B. 2

C. 5

D. 3

E. None of these

Ans. B

Sol.

150% of 220 × ? + 240 = 900

$\Rightarrow \frac{150}{100} \times 220 \times ? + 240 = 900$

$\Rightarrow 330 \times ? + 240 = 900$

$\Rightarrow 330 \times ? = 900 - 240$

$\Rightarrow 330 \times ? = 660$

$\Rightarrow ? = \frac{660}{330} = 2$

2. **Direction:** What should come in place of the question mark '?' in the following question?

$20\frac{1}{2} - 40\frac{1}{2} + 8^3 = ?$ A. 532

B. 474

C. 492

D. 502

E. None of these

Ans. C

Sol.

$? = 20\frac{1}{2} - 40\frac{1}{2} + 8^3$

$= 20 + \frac{1}{2} - \left(40 + \frac{1}{2}\right) + 512$

$= 20 + \frac{1}{2} - 40 - \frac{1}{2} + 512$

$= 512 - 20$

$= 492$

3. **Direction:** What should come in place of the question mark '?' in the following question?

$3^3 \times 10^3 \div 15 = ?$ A. 1600

B. 1500

C. 1800

D. 2000

E. 2400

Ans. C

Sol.

$? = 3^3 \times 10^3 \div 15$

$= 27 \times \frac{1000}{15}$

$= 9 \times \frac{1000}{5}$

$= 9 \times 200$

$= 1800$

4. **Direction:** What should come in place of the question mark '?' in the following question?

40% of (2.5 × 8 + ?) = 500   A. 1230

B. 1110

C. 1340

D. 980

E. None of these

Ans. A

Sol.

40% of (2.5 × 8 + ?) = 500

$\Rightarrow \frac{40}{100} \times (20 + ?) = 500$

$\Rightarrow 20 + ? = 500 \times \frac{5}{2}$

$\Rightarrow 20 + ? = 1250$

⇒ ? = 1250 − 20 = 1230

5. **Direction:** What should come in place of the question mark '?' in the following question?

$441 \times 2 = ?^2 − 18$ A. 26

B. 30

C. 28

D. 32

E. None of these

Ans. B

Sol.

$441 \times 2 = ?^2 − 18$

⇒ $882 = ?^2 − 18$

⇒ $?^2 = 882 + 18$

⇒ $?^2 = 900$

⇒ ? = 30

6. A shopkeeper bought an article for Rs. 200. He mark up this article by 50% and gives a discount of 40% to customer. Find the loss incurred by shopkeeper.

A. Rs. 22

B. Rs. 24

C. Rs. 20

D. Rs. 16

E. Rs. 18

Ans. C

Sol.

CP = Rs. 200

MP = 200 + 50% of 200 = Rs. 300

SP = 60% of 300 = Rs. 180

Loss = 200 − 180 = Rs. 20

7. Ratio of two numbers is 8 : 5. If 5 is added to both numbers then the ratio becomes 3 : 2. What is the sum of both numbers?

A. 91

B. 78

C. 52

D. 75

E. 65

Ans. E

Sol.

Let the numbers be 8x and 5x respectively.

$\dfrac{8x + 5}{5x + 5} = \dfrac{3}{2}$

⇒ 16x + 10 = 15x + 15

⇒ 16x − 15x = 15 − 10

⇒ x = 5

Sum of numbers = 8x + 5x = 13x = 13 × 5 = 65

8. Pipe A and B can fill a tank in 24 hours and 42 hours respectively. An outlet pipe C can empty the same tank in 48 hours. If all the three pipes are operated together then in how much time the tank will be filled?

A. 18 hours

B. $20\dfrac{3}{5}$ hours

C. $22\dfrac{2}{5}$ hours

D. 24 hours

E. None of these

Ans. C

Sol.

Let the capacity of tank be 336 units (LCM of 24, 42 and 48).

Efficiency of A = $\frac{336}{24}$ = 14 units

Efficiency of B = $\frac{336}{42}$ = 8 units

Efficiency of C = $\frac{336}{48}$ = 7 units

Required time = $\frac{336}{14 + 8 - 7}$ = $22\frac{2}{5}$ hours

9. Sum of radius and diameter of a circle is equal to the length of a rectangle. Breadth of rectangle is 10 cm and area of rectangle is 210 cm^2. Find the circumference of circle.

A. 66 cm

B. 44 cm

C. 88 cm

D. 35 cm

E. 56 cm

Ans. B

Sol.

Let the radius of circle be r.

Length of rectangle = $\frac{210}{10}$ = 21 cm

Now, r + 2r = 21

⇒ 3r = 21

⇒ r = 7

Circumference of circle = 2 × $\frac{22}{7}$ × 7 = 44 cm

10. A boat goes 70 km upstream in 5 hours and 60 km downstream in 4 hours. What is the speed of boat in still water?

A. 16.5 km/h

B. 18.5 km/h

C. 14.5 km/h

D. 12.5 km/h

E. None of these

Ans. C

Sol.

Let the speed of boat in still water and speed of stream be x km/h and y km/h respectively.

x − y = $\frac{70}{5}$

⇒ x − y = 14……(1)

x + y = $\frac{60}{4}$

⇒ x + y = 15……(2)

Adding (1) and (2) we get:

2x = 29

⇒ x = 14.5

Reasoning

1. **Direction :** Study the information carefully and answer the following questions.
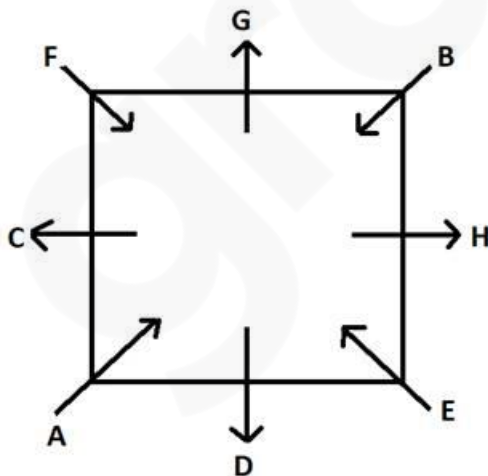
Eight people i.e. A, B, C, D, E, F, G and H sit in a square shaped table. Four people sit at the four corners of the table and are facing inside the table. Four people sit at the middle of the four sides and are facing outside the table.A sits opposite to B. D sits at one of the sides of the table. G sits third to the right of E. G does not sit adjacent to A and C F sits third to the right of D. H sits second to the right of G. E sits at the corner of the table.

What is the position of C with respect to H?

A. Immediate left

B. Opposite

C. Immediate right
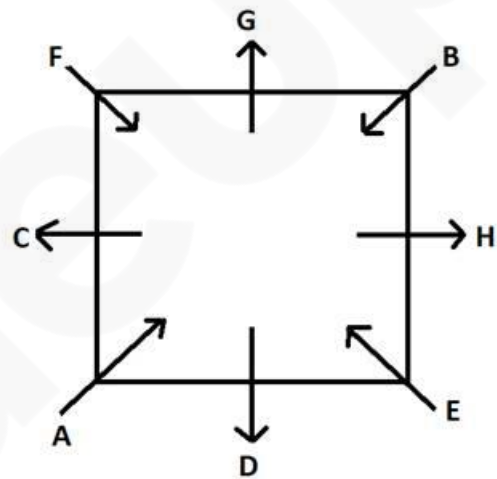
D. Third to the right

E. None of these

Ans. B

Sol.

2.Four of the following five are alike in a certain way and hence form a group. Find the one which does not belong to that group.
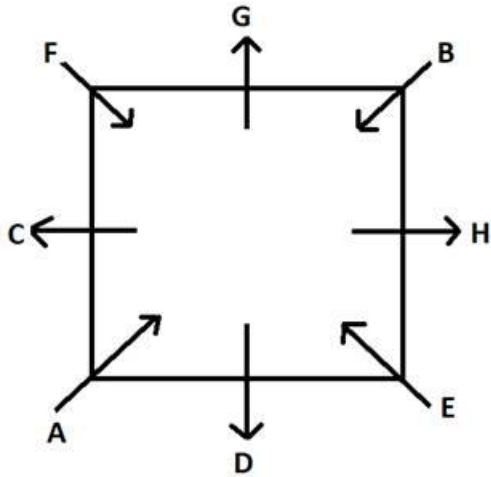
A. E

B. A

C. G

D. F

E. B

Ans. C

Sol.

3.How many people sit between A and H when counted from right of H?

A. One

B. Two

C. Three

D. Four

E. None of these

Ans. B

Sol.
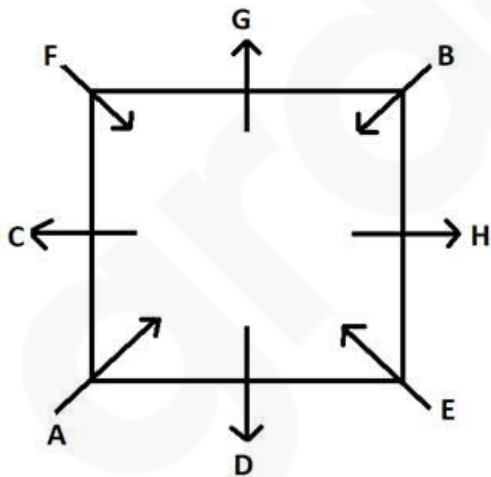
4.Who sits opposite to G?

A. E

B. A

C. D

D. B

E. None of these

Ans. C

Sol.
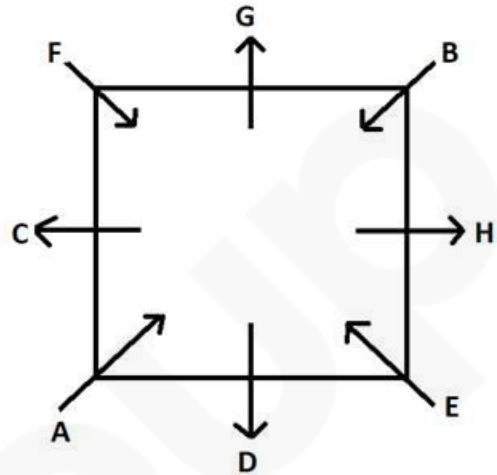

5.Who sits third to the right of C?

A. D

B. E

C. D

D. B

E. None of these

Ans. D

Sol.

6.If the word 'DOMINATE' letters within the words are arranged in alphabetical order from the left to the right, then how many letters' positions in the word will remain unchanged?

A. None

B. One

C. Two

D. Three

E. None of these

Ans. B

Sol.

Given Word → DOMINATE

After Arrangement → ADEIMNOT

Unchanged word → I

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

Six people C, D, E, F, G and H are of different heights. D is taller than F but not as tall as C G is not the shortest person. D is shorter than only one person. F is shorter than E but taller than G. The height of the tallest person and the second shortest person is 72m and 39m respectively.

If the sum of the height of G and E is 97, the sum of the height of D and C is 132. Then the sum of the height of D and E is ____.

A. 117

B. 118

C. 119

D. 120

E. None of these

Ans. B

Sol.

C > D > E > F > G > H

8.What should be the possible height of H?

A. 37

B. 47

C. 57

D. 67

E. None of these

Ans. A

Sol.

C > D > E > F > G > H

9.How many people are shorter than E?

A. One

B. Two

C. Three

D. None

E. None of these

Ans. C

Sol.

C > D > E > F > G > H

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

Statements:

All Tops are Shops.

No Shops are Cell.

All Phone are Cell.

Conclusions:

I. No Shop is Phone.

II. All Tops being Cell is a possibility.

A. Only conclusion I follows.

B. Only conclusion II follows.

C. Either conclusion I or II follows.

D. Neither conclusion I nor II follows.

E. Both conclusion I and II follow.

Ans. A

Sol.