

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**



**Dream Big Institution**  
No. 1 Platform For Preparation of Govt Exams

**Directions (01-15):** What value should come in the place of (?) in the following questions?

**Simplification**

1)  $5^{3/2} \div (25 * \sqrt{20}) = ? \div 100$

- a) 8
- b) 10
- c) 12
- d) 6
- e) 5

**Answer: B**

$5^{3/2} \div (25 * \sqrt{20}) = ? \div 100$

$5 * \sqrt{5} \div (25 * \sqrt{5} * \sqrt{4}) = ? \div 100$

$5 \div 2 = ? \div 4$

$? = 10$

2)  $16 * 6 \div 3 - 23 = ?$

- a) 24
- b) 9
- c) 15
- d) 12
- e) 18

**Answer: B**

$16 * 6 \div 3 - 23 = ?$

**Dream Big Institution**

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

$32 - 23 = ?$

$? = 9$

**3)  $55 \div 11 * 48 - ?^2 = 224$**

a) 9

b) 6

c) 7

d) 8

**e) 4**

**Answer: E**

$55 \div 11 * 48 - ?^2 = 224$

$240 - ?^2 = 224$

$?^2 = 16$

$? = 4$

**4)  $\sqrt{625 - 32 + 171} \div 19 = ?$**

a) 2

b) 7

c) 6

d) 4

**e) 5**

**Answer: A**

$\sqrt{625 - 32 + 171} \div 19 = ?$

$25 - 32 + 9 = ?$

$? = 2$

**5)  $380 + 48 * 5 - 7^2 = ?$**

a) 450

b) 571

c) 550

d) 400

e) 600

**Answer: B**

$380 + 48 * 5 - 7^2 = ?$

$380 + 240 - 49 = ?$

$? = 571$

**6)  $60 \div 15 * ? - 16^2 = 400$**

a) 138

b) 144

c) 185

d) 120

e) 164

**Answer: E**

$60 \div 15 * ? - 16^2 = 400$

$4 * ? = 656$

$? = 164$

**7)  $45 * 20 + 2.5 * 120 = 1193 - ?$**

a) -8

b) -10

c) -7

d) -11

e) -6

**Answer: C**

$45 * 20 + 2.5 * 120 = 1193 - ?$

$900 + 300 = 1193 - ?$

$? = -7$

**8)  $4 \left(\frac{3}{15}\right) * 60 - 200 = ? * 13$**

**Dream Big Institution**

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

- a) 3
- b) 6
- c) 7
- d) 4
- e) 8

**Answer: D**

$$4 \left(\frac{3}{15}\right) * 60 - 200 = ? * 13$$

$$\frac{63}{15} * 60 - 200 = ? * 13$$

$$252 - 200 = ? * 13$$

$$? = 4$$

**9)  $105 \div 15 + 1728 \div 12^2 = ?$**

- a) 12
- b) 17
- c) 19
- d) 15
- e) 20

**Answer: C**

$$105 \div 5 + 1728 \div 12^2 = ?$$

$$7 + 12 = ?$$

$$? = 19$$

**10)  $\sqrt{16900 \div 10 + 28 \div 7 + ?} = 81$**

- a) 74
- b) 64
- c) 60
- d) 53
- e) 56

**Answer: B**

$$\sqrt{16900 \div 10 + 28 \div 7 + ?} = 81$$

$$13 + 4 + ? = 81$$

$$? = 64$$

**11)  $180 + 350 - 120 = ? - 600$**

- a) 1184
- b) 1080
- c) 1010
- d) 1120
- e) 1150

**Answer: C**

$$180 + 350 - 120 = ? - 600$$

$$? = 1010$$

**12)  $165 \div 11 - 140 + 50 = 620 - ?$**

- a) 695
- b) 680
- c) 686
- d) 664
- e) 658

**Answer: A**

$$165 \div 11 - 140 + 50 = 620 - ?$$

$$15 - 140 + 50 = 620 - ?$$

$$? = 695$$

**13)  $15 * 10 + ? - 216 \div 6 = 130$**

- a) 24
- b) 16
- c) 28
- d) 21

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

e) 18

**Answer: B**

$$15 * 10 + ? - 216 \div 6 = 130$$

$$150 + ? - 36 = 130$$

$$? = 16$$

**14)  $900 * 5 \div 18 + ? = 480$**

a) 260

b) 320

c) 230

d) 140

e) 180

**Answer: C**

$$900 * 5 \div 18 + ? = 480$$

$$250 + ? = 480$$

$$? = 230$$

**15)  $425 + 22 * 5 \div ? = 535$**

a) 1

b) 3

c) 7

d) 8

e) 9

**Answer: A**

$$425 + 22 * 5 \div ? = 535$$

$$425 + 110 \div ? = 535$$

$$? = 1$$

**Directions (16-20):** Read the following information carefully and answer the questions given below.

The given table chart shows the number of stocks sold in 2021 and 2022 by four different companies namely A, B, C and D.

Company	Number of stocks sold in 2021	Number of stocks sold in 2022
A	270	450
B	420	320
C	300	400
D	480	435

**16)** If the average number of stocks sold by Company C, D and E in 2021 is 400, then find the number of stocks sold by Company E in 2021.

a) 360

b) 420

c) 450

d) 380

e) None of these

**Answer: B**

Number of stocks sold by Company E in 2021 =  
 $400 * 3 - 300 - 480 = 1200 - 780 = 420$

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

17) Find the ratio of the number of stocks sold by Company C in 2021 to the number of stocks sold by Company D in 2022.

- a) 20:29
- b) 13:15
- c) 18:17
- d) 11:12
- e) None of these

**Answer: A**

Required ratio =  $300:435 = 20:29$

18) Find the difference between the number of stocks sold by Company A and B together in 2021 and the number of stocks sold by Company C and D together in 2022.

- a) 120
- b) 160
- c) 101
- d) 145
- e) None of these

**Answer: D**

Required difference =  $(400 + 435) - (270 + 420) = 835 - 690 = 145$

19) Out of the total number of stocks sold by Company D in 2021, 30% of the stocks sold were of X brand and the remaining stocks were of Y brand. Find the difference between the number of

X and Y brand stocks sold by Company D in 2021.

- a) 164
- b) 180
- c) 192
- d) 176
- e) None of these

**Answer: C**

Number of X brand stocks sold by Company D in 2021 =  $480 * 30/100 = 144$

Number of Y brand stocks sold by Company D in 2021 =  $480 - 144 = 336$

Required difference =  $336 - 144 = 192$

20) The number of stocks sold by Company B and C together in 2021 is what percentage of the number of stocks sold by Company C in 2022?

- a) 125%
- b) 180%
- c) 160%
- d) 100%
- e) None of these

**Answer: B**

Required percentage =  $(420 + 300)/400 * 100 = 720/400 * 100 = 180\%$

21) Ram invested Rs.4500 in compound interest at R% per annum for 2 years and obtained an interest of Rs.1980. If he invested the same

## IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023 (Quantitative Aptitude)

amount in simple interest at (R-5)% per annum for 3 years, then find the simple interest received by Ram.

- a) Rs.2100
- b) Rs.3500
- c) Rs.1550
- d) Rs.2025
- e) None of these

**Answer: D**

$$4500 * (1 + R/100)^2 - 4500 = 1980$$

$$(1 + R/100)^2 - 1 = 1980/4500$$

$$(1 + R/100)^2 = 0.44 + 1$$

$$(1 + R/100)^2 = 1.2^2$$

$$100 + R = 120$$

$$R = 120 - 100 = 20$$

$$\text{The simple interest received by Ram} = 4500 * 3 * (20 - 5)/100 = 4500 * 3 * 15/100 = \text{Rs.2025}$$

**22) The selling price of the book, when marked up by 40% and then sold at 25% discount is equal to the selling price of the same book when marked up by 50% and then sold with a discount of Rs.90. Find the selling price of the book if it is to be sold at 30% profit.**

- a) Rs.260
- b) Rs.520
- c) Rs.130
- d) Rs.650

e) None of these

**Answer: A**

Let the cost price of the book be 100x.

$$100x * 140/100 * 75/100 = 100x * 150/100 - 90$$

$$140x * 75/100 = 150x - 90$$

$$150x - 105x = 90$$

$$x = 90/45 = 2$$

$$\text{The cost price of the book} = 100 * 2 = 200$$

$$\text{The selling price of the book if it is to be sold at 30% profit} = 200 * 130/100 = \text{Rs.260}$$

**23) A starts a business with an investment of Rs.80000. After 6 months B joins with a certain investment. At the end of one year, the profit share of B is Rs.21000 out of the total profit of Rs.49000. Find the investment of B.**

- a) Rs.160000
- b) Rs.100000
- c) Rs.120000
- d) Rs.140000
- e) Rs.150000

**Answer: C**

Let the investment of B be x.

$$\text{Ratio of the profit share of A to B} = (49000 - 21000):21000 = 28000:21000 = 4:3$$

$$80000 * 12/(x * 6) = 4/3$$

$$x = 120000$$

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

**24) A boat covers 54 km upstream in 6 hours and the boat covers 60 km downstream in 5 hours.**

**Find the ratio of the speed of the boat in still water to the speed of the stream.**

- a) 5:2
- b) 7:1
- c) 4:3
- d) 9:5
- e) 3:1

**Answer: B**

The downstream speed of the boat =  $60/5 = 12$  km/hr

The upstream speed of the boat =  $54/6 = 9$  km/hr

The speed of the stream =  $(12 - 9)/2 = 3/2 = 1.5$  km/hr

The speed of the boat in still water =  $(12 + 9)/2 = 21/2 = 10.5$  km/hr

Required ratio =  $10.5:1.5 = 7:1$

**25) The average age of five students is 85 years. If one new student is added, then the average decreases by 5 years. Find the age of the new students.**

- a) 30 years
- b) 42 years
- c) 28 years
- d) 36 years
- e) 55 years

**Answer: E**

The age of the new student =  $(5 + 1) * (85 - 5) - 5 * 85$   
 $= 6 * 80 - 5 * 85$   
 $= 55$  years

**26) The side of the square is 14 cm less than the sum of the length and the breadth of the rectangle and the breadth of the rectangle is 12 cm. If the perimeter of the square is 16 cm more than that of the rectangle, then find the length of the rectangle.**

- a) 24 cm
- b) 18 cm
- c) 15 cm
- d) 20 cm
- e) 30 cm

**Answer: A**

Let the length of the rectangle and the side of the square be  $a$  cm and  $b$  cm respectively.

$$(12 + a) - b = 14$$

$$b = 12 + a - 14 = a - 2$$

$$4 * (a - 2) - 2 * (12 + a) = 16$$

$$4a - 8 - 24 - 2a = 16$$

$$a = 48/2 = 24$$

The length of the rectangle = 24 cm

**Directions (27-31): Find out the wrong number in the following number series.**

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

**27) 1180, 604, 318, 172, 100, 64, 46**

- a) 100
- b) 72
- c) 604
- d) 318
- e) 172

**Answer: D**

$$1180 - 576 = 604$$

$$604 - 288 = 316$$

$$316 - 144 = 172$$

$$172 - 72 = 100$$

$$100 - 36 = 64$$

$$64 - 18 = 46$$

**28) 19.5, 21, 25.5, 30, 35.5, 42**

- a) 35.5
- b) 19.5
- c) 25.5
- d) 16
- e) 21

**Answer: E**

$$19.5 + 2.5 = 22$$

$$22 + 3.5 = 25.5$$

$$25.5 + 4.5 = 30$$

$$30 + 5.5 = 35.5$$

$$35.5 + 6.5 = 42$$

**29) 160, 238, 268, 286, 256, 334**

- a) 334

- b) 268

- c) 238

- d) 160

- e) 256

**Answer: B**

$$160 + 78 = 238$$

$$238 - 30 = 208$$

$$208 + 78 = 286$$

$$286 - 30 = 256$$

$$256 + 78 = 334$$

**30) 180, 376, 632, 956, 1317, 1840**

- a) 1317
- b) 376
- c) 632
- d) 1840
- e) 956

**Answer: A**

$$180 + 14^2 = 376$$

$$376 + 16^2 = 632$$

$$632 + 18^2 = 956$$

$$956 + 20^2 = 1356$$

$$1356 + 22^2 = 1840$$

**31) 240, 234, 228, 214, 196, 170**

- a) 228
- b) 240
- c) 234
- d) 170

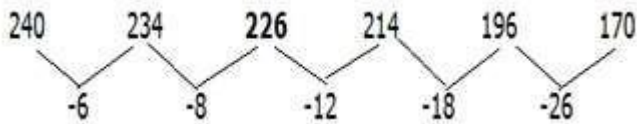
**Dream Big Institution**



## IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023 (Quantitative Aptitude)

e) 196

**Answer: A**



**32) One boy can do “w” work in 120 days and one girl can do the same work in 100 days. In how many days 12 boys and 15 girls together can complete “3w” work?**

- a) 32 days
- b) 12 days
- c) 15 days
- d) 20 days
- e) None of these

**Answer: B**

$$1B * 120 = 1G * 100$$

$$B/G = 100/120 = 5/6$$

$$12B + 15G = 12(5G/6) + 15G = 25G$$

$$25G * x/3w = 1G * 100/w$$

$$x = 100 * 3/25 = 12 \text{ days}$$

**33) The ratio of A’s age x years hence to B’s age 4 years ago is 5:2 and the sum of the present age of A and B is 56 years. If the age of B and C after 2x years is 54 years and the present age of C is 18 years, then find the present age of A.**

- a) 20 years

b) 16 years

c) 24 years

d) 36 years

e) Cannot be determined

**Answer: D**

$$(5y - x) + (2y + 4) = 56$$

$$7y - x = 52 \text{ -----[1]}$$

$$2y + 4 + 2x + 18 + 2x = 54$$

$$2y + 4x = 32 \text{ -----[2]}$$

From equation [1] and [2]

$$30y = 240$$

$$y = 8$$

$$56 - 52 = x$$

$$x = 4$$

$$\text{Present age of A} = 5 * 8 - 4 = 36$$

**34) A can complete the work in 40 days. If A started the work and after 8 days, B joined the work, then A and B together complete the remaining work in 16 days, then find the time taken by A and B together to complete the work.**

- a) 20 days
- b) 18 days
- c) 24 days
- d) 30 days
- e) 15 days

**Answer: A**

**IBPS Clerk Prelims Memory Based Paper Held on 26<sup>th</sup> August 2023  
(Quantitative Aptitude)**

$$1/40 * 8 + (1/40 + 1/B) * 16 = 1$$

$$1/5 + 16/40 + 16/B = 1$$

$$16/B = 1 - 1/5 - 2/5$$

$$16/B = 2/5$$

$$B = 40$$

A and B together complete the work =  $1/40 + 1/40$

$$= 2/40 = 20 \text{ days}$$

**35) A train length 320 m crosses 400 m platform in 40 seconds. If the train running at 33.33% less than its usual speed, then find the time taken by the train to cross a pole (approximately).**

a) 29 seconds

b) 23 seconds

c) 35 seconds

d) 27 seconds

e) 30 seconds

**Answer: D**

Let the usual speed of the train be  $x$  m/sec.

$$320 + 400 = x * 40$$

$$x = 720/40 = 18 \text{ m/s}$$

The new speed of the train =  $18 * (100 -$

$$33.33)/100 = 18 * 2/3 = 12 \text{ m/sec}$$

$$\text{Required time} = 320/12 = 26.67 = 27 \text{ seconds}$$

**Dream Big Institution**



**Dream Big Institution**

No. 1 Platform For Preparation of Govt Exams