

IBPS POs Prelims Grand Test

No. of Questions: 100

Max. Marks: 100

Time: 60 min

[Each Question carries 1 mark. For each incorrect response, 0.25 mark will be deducted]

నిన్నటి 'విద్య' తరువాయి...

74. What is the area of the square?
I) The diagonal of square is 14 cm.
II) Perimeter of the square is 4 times the diagonal of the square.
1) Statement I alone is sufficient but statement II alone is not sufficient.
2) Either statement I or statement II alone is sufficient
3) both the statements I and II together are necessary
4) statement II alone is sufficient but statement I alone is not sufficient
5) Neither statement I nor statement II are sufficient.
75. What is the marked price of the article?
I) When a discount of 15% is given on marked price, the loss occurred is 20%. The cost price of the article is Rs.255.
II) The marked price of the article is 30% above the cost price.
1) If the data in statement I alone sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
2) If the data in statement II alone is sufficient to answer

- the question, while the data in statement I alone is not sufficient to answer the question.
3) If the data either statement I alone or in statement II alone is sufficient to answer the question.
4) If the data in both the statement I and II together are not sufficient to answer the question.
5) If the data in both the statement I and II together are necessary to answer the question.
76. Manjhi, the fisherman can row 5 km downstream in the same time as 3 km upstream. He rows his boat to a place 30 km away and back in 16 hours. What is his speed in still water?
1) 3.5 km/h 2) 4 km/h
3) 4.5 km/h 4) 5 km/h
5) 5.5 km/h
77. The area of a square is 196 sq. cm. whose side is double the radius of a circle. The circumference of the circle is equal to breadth of a rectangle. If perimeter of the rectangle is 164 cm, what is the length of the rectangle
1) 27 cm 2) 38 cm 3) 44 cm
4) 41 cm 5) 32 cm
78. Akriti is 30% more efficient than

- Kushal. Akriti can harvest a field in 23 days. If Akriti and Kushal work together, how much time will it take to harvest the whole field?
1) 12 2) 13 3) 10
4) 14 5) 15
79. The total CP of two watches A and B is Rs.840. If by selling A at a profit of 16% and B at a loss of 12%, there is no loss or gain in the whole transaction, then the CP of watches A and B respectively are:
1) Rs.360, Rs.480
2) Rs.480, Rs.360
3) Rs.380, Rs.460
4) Rs.400, Rs.440
5) None of the above
80. Tarun takes a loan of Rs.17080 from Madhav to invest in a startup business. He has to repay this in two equal annual installments. If the rate of interest be 20% compound annually, the value of each installment is- (approximate)
1) Rs.12050 2) Rs.11890
3) Rs.14079 4) Rs.11180
5) Rs.13430
81. A retailer allows a trade discount of 20% and a cash discount of 6.25% on the marked price of the products and gets a net profit of

20% on the cost. By how much above the cost, should the products be labeled for sale?

- 1) 40% 2) 50% 3) 60%
4) 70% 5) 75%

82. The average weight of a group of 7 men is 76 kg. when two men whose weights are 79 kg and 85 kg join the group and one man leaves group, the average weight of the group goes up by 2.75 kg. what is the weight of the man who left the group?
1) 69 2) 71 3) 62
4) 64 5) 66

83. 6 years ago, the ratio of Ram's age to his son's age was 5 : 1. 6 years later, the ratio of Ram's age to his son's age would be 7 : 3. What was Ram's age when his son was born?
1) 22 years 2) 24 years
3) 26 years 4) 28 years
5) 30 years

84. A and B entered into a partnership with Rs.1500 and Rs.2000 respectively. At end of 4 months A added some money which was $\frac{2}{5}$ th of his total contribution and at the end of 6 months B withdrew half of his capital. At the end of 8 months C entered with a capital Rs.3500. After completion of one year, in what ratio will the profit divided?
1) 57 : 45 : 35 2) 13 : 9 : 7
3) 19 : 15 : 12 4) 6 : 3 : 2

- 5) None of these
85. The ratio of the number of students studying in schools A, B and C is 6 : 8 : 7 respectively. If the number of students studying in each of the schools is increased by 20%, 15% and 20% respectively, what will be the new ratio of the number of students in schools A, B and C ?
1) 18 : 23 : 21 2) 12 : 18 : 17
3) 18 : 21 : 17
4) Cannot be determined
5) None of these

(86–90) Study the below data and answer the questions that follow:

Sales of various brands of soaps are given in Mumbai and Kolkata.



Total sales of soaps in Mumbai and Kolkata are 50 lakh and 40 lakh units respectively.

86. Which brand of soap had the least difference in the sales in the two cities?
1) Lux 2) Dove
3) Cinthol 4) Medimix
5) Pears

మిగతా రేపటి 'విద్య' లో..

KEY WITH EXPLANATION

74. **1;** From statement I:
Area of the square = $\frac{1}{2} \times d^2$
Area = $\frac{1}{2} \times 14^2$
We can get the area from I alone.
From II,
The length of diagonal is not known.
Hence, statement II alone is not sufficient to answer the question.
Hence, statement I alone can answer the question.
75. **1;** Let x be the price.
From I, $x \times \frac{85}{100} = 255$ $\frac{80}{100}$
 $x = 240$
From II, we cannot find the marked price.
Only statement I is required.
76. **2;** Let the time taken by Manjhi to row 5 km downstream and 3 km upstream be x hours
 $\therefore$ His speed downstream $\frac{5}{x}$ km/h and his speed upstream $\frac{3}{x}$ km/h
and his speed upstream = $\frac{3}{x}$
Given, he rows his boat to a place 30 km away and back in 16 hours
 $\therefore \frac{30}{\frac{5}{x}} + \frac{30}{\frac{3}{x}} = 16$

- $\Rightarrow 6x + 10x = 16 \Rightarrow x = 1$
 $\therefore$ speed downstream = 5 km/h and speed upstream = 3 km/h
 $\Rightarrow$ speed in still water $= \frac{5+3}{2} = 4$ km/h
77. **2;**
Side of square = 14 cm
Radius of the circle $= \frac{14}{2} = 7$ cm
Breadth of the rectangle = circumference of the circle $= 2 \times \frac{22}{7} \times 7 = 44$ cm
Length of the rectangle $= \frac{164}{2} - 44 = 38$ cm
78. **2;**
The portion Akriti can harvest a field in 1 day = $\frac{1}{23}$
Let the portion of field harvest by Kushal in 1 day = n
Or, $n \times \frac{130}{100} = \frac{1}{23}$
Or, $n = \frac{100}{23 \times 130} = \frac{10}{23 \times 13}$
Portion of the field harvested by Akriti and Kushal in 1 day $= \frac{1}{23} + \frac{10}{23 \times 13} = \frac{23}{23 \times 13} = \frac{1}{13}$
Akriti And Kushal harvest the whole field in 13 days
79. **1;** Let the CP of watch 1 = Rs. x .

- CP of 2nd watch = $840 - x$
SP of 1st watch $= \frac{116x}{100}$ [16% profit]
SP of 2nd watch $= \frac{88(840 - x)}{100}$ [12% loss]
No loss/gain
 $\Rightarrow 840 = \frac{116x}{100} + \frac{88(840 - x)}{100}$
 $\Rightarrow 840 \times 100 = 116x - 88x + 840 \times 88$
 $\Rightarrow 84000 = 28x + 73920$
 $\Rightarrow 28x = 84000 - 73920$
 $\Rightarrow 28x = 10080$
 $\Rightarrow \frac{10080}{28} \Rightarrow x = 360$
CP of 1st watch = 360
CP of 2nd watch = $840 - x = 840 - 360 = 480$
80. **4;** Let, the value of each installment be Rs. x . Then,
 $\left\{ \frac{x}{\left(1 + \frac{20}{100}\right)} + \frac{x}{\left(1 + \frac{20}{100}\right)^2} \right\} = 17080$
 $\frac{5x}{6} + \frac{25x}{36} = 17080$
 $\frac{55x}{36} = 17080$
Or, $55x = 17080 \times 36$
Or, $x = 11180$
81. **3;** Let the market price be 100
Trade discount = 20%

- Trade price = 80
Price after cash discount $= 80 \times 0.9375 = 75$
Therefore, cost price $= \frac{75}{1.2} = 62.5$
Required percentage $= (100 - 62.5) \times \frac{100}{62.5} = 60\%$
82. **5;**
Initial weight of the group $76 \times 7 = 532$ kg
Now the group has 8 members hence total weight $= 78.75 \times 8 = 630$ kg
Suppose the weight of the person who left the group is w kg
 $532 - w + 79 + 85 = 630$
 $w = 66$ kg
83. **2;** Let the present ages of Ram and his son be ' x ' and ' y '
Given that,
 $\frac{(x-6)}{(y-6)} = \frac{5}{1}$
 $\Rightarrow x - 6 = 5y - 30$
 $\Rightarrow x = 5y - 24 = 24 \dots \dots$ Equation 1
Also,
 $\frac{x+6}{y+6} = \frac{7}{3}$
 $\Rightarrow 3x + 18 = 7y + 42$
 $\Rightarrow 3x = 7y + 24 \dots \dots$ Equation 2
Solving equations 1 and 2, we get: $x = 36$ and $y = 12$

- $\Rightarrow$ Ram's age when his son was born $= 36 - 12 = 24$
84. **2;**
Suppose after 4 months A added Rs. a
 $(1500 + a) \times \frac{2}{5} = a$
 $\Rightarrow a = 1000$
Now the required ratio $= (1500 \times 4 + 2500 \times 8) : (2000 \times 6 + 1000 \times 6) : (3500 \times 4)$
 $= 26000 : 18000 : 14000$
 $= 13 : 9 : 7$
85. **1;**
Let the respective number of students be $6n$, $8n$ and $7n$.
New number of students $= 6 \times 1.2n$, $8 \times 1.15n$ and $7 \times 1.2n$
 $= 7.2n : 9.2n : 8.4n$
 $= 72 : 92 : 84$
 $= 18 : 23 : 21$

(86–90)

Soap	Mumbai	Kolkata
Lux	600000	600000
Dove	750000	500000
Cinthol	1000000	880000
Medimix	500000	680000
Pears	1250000	820000
Others	900000	520000
Total	5000000	4000000

86. **1;** Sales of Lux in Mumbai = sale of Lux in Kolkata
Hence there is no difference in the sale