SBI Clerk 2018
Quant Aptitude
Previous Year Ques. Paper

Direction: What will come in place of the question mark (?) in the following number series?
1. 256, ?, 190, 167, 148, 131
A. 165
B. 219
C. 136
D. 216
E. 210

**Directions:** What should come in place of the question mark (?) in the following number series?

2. 8, 6, 9, 23, ?
A. 53
B. 145
C. 110
D. 75
E. 87

###COMMON###3###3###**Direction:** What should come in place of question mark (?) in the following number series?
3. 1, 244, 163, 190, 181, ?,
A. 188
B. 198
C. 221
D. 184
E. 196

Direction: (4-8) Given below is a pie chart which represents the percentage distribution of the students studying different subjects.
 Total no. of students =3000

- History 15%
- Geography 22%
- Economics 20%
- Science 15%
- Biology 28%
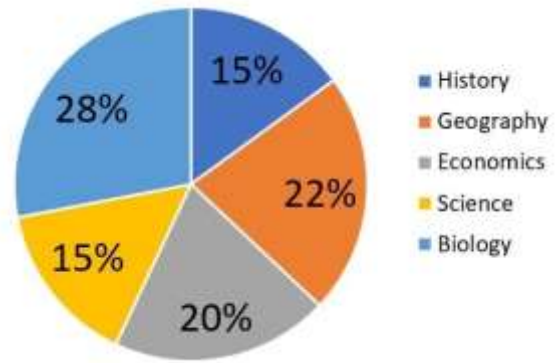
4. What is the average number of students studying Economics, Biology and Geography subjects?
A. 730
B. 700
C. 850
D. 780
E. None of these

5.
If 75% of students studying Economics appeared in the exam and 80% of students passed the exam out of the students appeared, then how many students failed in the exam?
A. 90
B. 120
C. 40
D. 50
E. 60

6. What is the difference between the sum of the number of students studying Geography and Science and the sum of the number of students studying Economics and Biology?
A. 310
B. 450

C. 370
D. 330
E. None of these

7. If the ratio of the number of male students to female students studying Biology is 4 : 3, then what is the difference between the number of male and female students studying Biology?
A. 110
B. 70
C. 120
D. 100
E. None of these

8. If 20% of the students studying History and 40% of students studying Science are female students. Then what is the total number of male students studying Science and History?
A. 630
B. 660
C. 700
D. 750
E. 650

Direction: What should come in place of question mark (?) in the following question?
9. 115 ÷ 5 + 12 × 6 = ? + 64 ÷ 4 - 35
A. 95
B. 136
C. 102
D. 74
E. 114

Direction: What should come in place of question mark (?) in the following question?
10.
$45\% \text{ of } 400 + \sqrt{?} = 56\% \text{ of } 750 - 40\% \text{ of } 350$
A. 10000
B. 1000
C. 10201
D. 9801
E. 10404

11.The difference between the interests earned when Rs.P is invested for four years in a scheme offering 9% p.a. simple interest and when the same sum (Rs. P) is invested for two years in another scheme offering 12% p.a. simple interest is Rs.480. What is the value of P?
A. 2000
B. 3500
C. 2500
D. 4000
E. 3000

12.The average age of 80 boys in a class is 15 years. The average age of a group of 15 boys in the class is 16 years and the average age of another 25 boys in the class is 14 years. What is the average age of the remaining boys in the class?
A. 15.25 years
B. 14 years
C. 14.75 years
D. Cannot be determined
E. None of these

13. Two partners invest Rs. 12500 and Rs. 8500 respectively in a business and agree that 40% of the profit will be divided equally between them and the remaining profit will be donated. If one partner gets Rs. 240 more than the other, find the total profit made in the business.
A. Rs. 3250
B. Rs. 4050
C. Rs. 3550
D. Rs. 3150
E. None of these

14. The ratio of the numerical value of a rectangle's area to its perimeter is 60 : 11. If the length and breadth of the rectangle are in the ratio 6 : 5. Find the length of the rectangle.
A. 40 units
B. 30 units
C. 13 units
D. 24 units
E. 56 units

Direction: Each question contains Quantity I and Quantity II. Read the contents clearly and answer your questions accordingly.
15.
Quantity I: 3 years ago the ratio of the ages of A to B was 3 : 4 and after 2 years the sum of their ages will be 45 years. Then the present age of A
Quantity II: 5 years ago, the ratio of the ages of P and Q was 3: 4. P's age after 6 years is equal to the present age of Q. Then the present age of P

A. Quantity I > Quantity II
B. Quantity I ≥ Quantity II
C. Quantity I<Quantity II
D. Quantity I $\leq$ Quantity II
E. Quantity I = Quantity II or Relation cannot be established

Direction: Each question contains Quantity I and Quantity II. Read the contents clearly and answer your questions accordingly.
16.
Quantity I: The SI on a certain sum of money for 3 years at 5% per annum is Rs.4800. Then the principle
Quantity II: The CI on a certain sum of money for 2 years at 6% per annum is Rs.3708. Then the principle
A. Quantity I > Quantity II
B. Quantity I ≥ Quantity II
C. Quantity I<Quantity II
D. Quantity I $\leq$ Quantity II
E. Quantity I = Quantity II or Relation cannot be established

Direction: Given below are two quantities named I and II. Based on the given information, you have to determine the relation between the two quantities. You should use the given data and your knowledge of Mathematics to choose among the possible answers.
17. **Quantity I:** Vipin can swim at 6 km/hr in still water. The river flows at 3 km/hr and it takes 8 hours more upstream then downstream

for the same distance, then the distance is

Quantity II: A man can row 25 km/hr in still water and the river is running at 15 km/hr. If the man takes 2 hr to row to a place and back. The distance is

A. Quantity I > Quantity II

B. Quantity I ≥ Quantity II

C. Quantity I<Quantity II

D. Quantity I $\leq$ Quantity II

E. Quantity I = Quantity II or Relation cannot be established

Direction: In the following question two equations are given in variables x and y. You have to solve these equations and determine relation between x and y.

18. I. $x^2 - 11x + 28 = 0$

II. $y^2 - 18y + 81 = 0$

A. x > y

B. x < y

C. x=y, or relation cannot be established between x and y

D. x ≥ y

E. x ≤ y
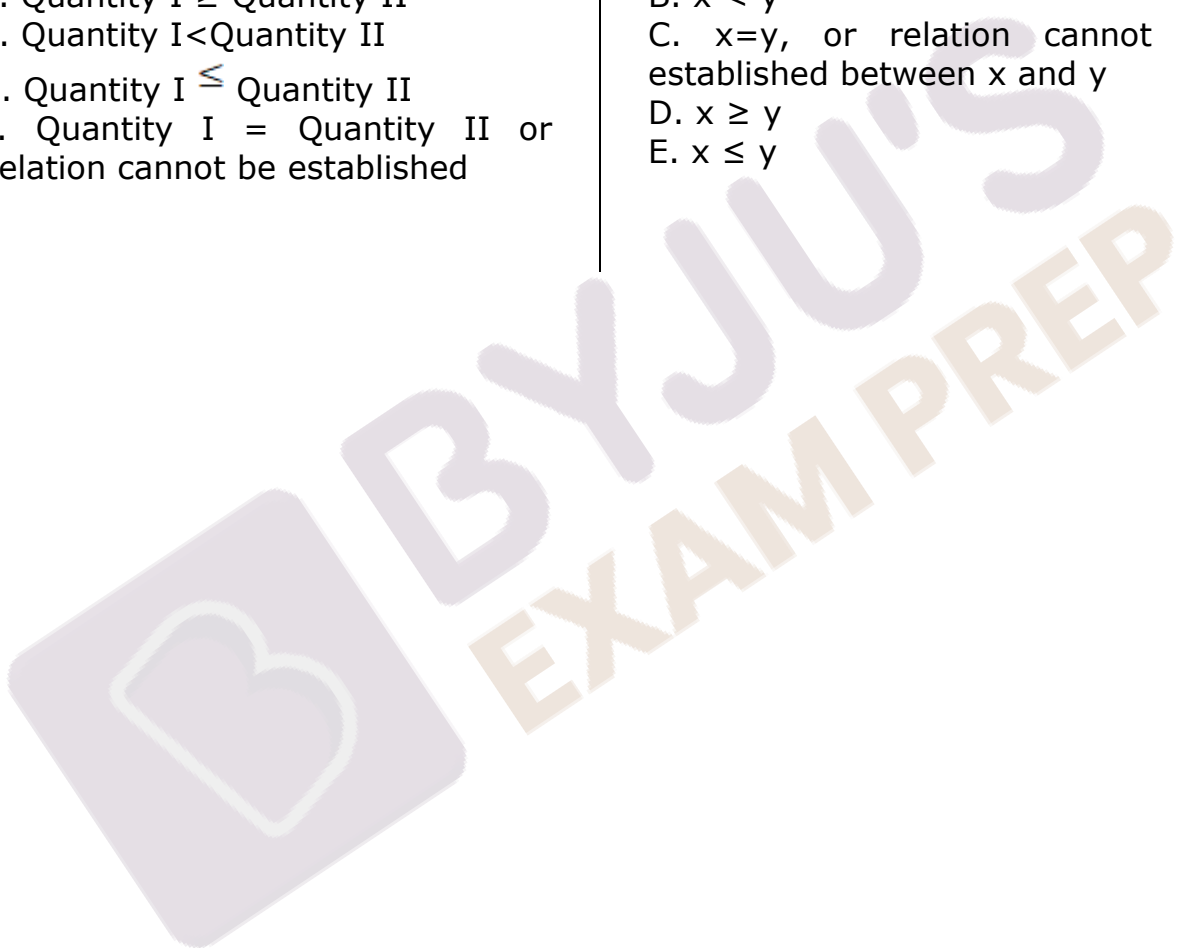
ANSWERS

1. Ans. B.

Given number series
131 + 17 = 148
148 + 19 = 167
167 + 23 = 190
190 + 29 = 219
219 + 37 = 256
Here addition is based on 17 + 2= 19, 19 + 4 = 23, 23 + 6 = 29, 29 + 8 = 37

2. Ans. E.

Given number 8, 6, 9, 23, ?
The pattern of given series is:
8 x 1 - 2 = 6
6 x 2 - 3 = 9
9 x 3 - 4 = 23
23 x 4 - 5 = **87**

3. Ans. D.

Given number series - 1, 244, 163, 190, 181, ?,

The pattern is as follows
$1 + 3^5 = 244$
$244 - 3^4 = 163$
$163 + 3^3 = 190$
$190 - 3^2 = 181$
$181 + 3^1 = $ **184**

4. Ans. B.

Total no. of students in these subjects =(20%+22%+28%) of 3000=2100

Required average no. of students=2100/3 = 700.

5. Ans. A.

Students who appeared in Economics exam = 75% of 20% of 3000 = 450

∴ Failed students=20% of 450=90

6. Ans. D.

Geography and Science
- 22%+15%
Economics and Biology
- 20%+28%
Required difference
=[(20%+28%)−(22%+15%)]of 3000 = 11% of 3000 =330.

7. Ans. C.

Students in Biology = 28%.
Male: female = 4:3
Difference = (4/7) - (3/7)
Required difference=((4-3)/7) of 28% of 3000=120

8. Ans. A.

No. of male students =80% of 15% of 3000+60% of 15% of 3000=630

9. Ans. E.

As per the **BODMAS** rule, the priority in which the operations

should be done is:

Priority wise operations	Symbol
B-Bracket	()
O-Of	Of
D-Division	/, ÷
M-Multiplication	*, ×
A-Addition	+
S-Subtraction	-

Note: Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$(115/5) + 12 × 6 = ? + (64/4) − 35$
$23 + 72 = ? + 16 − 35$
$95 = ? - 19$
$95+19 = ?$
$? = 114$

10. Ans. A.

$45\% \text{ of } 400 + \sqrt{?} = 56\% \text{ of } 750 − 40\% \text{ of } 350$

$\Rightarrow \dfrac{45}{100} × 400 + \sqrt{?} = \dfrac{56}{100} × 750 − \dfrac{40}{100} × 350$

$\Rightarrow 180 + \sqrt{?} = 420 − 140$

$\Rightarrow 180 + \sqrt{?} = 280$

$\Rightarrow \sqrt{?} = 280 − 180$

$\Rightarrow \sqrt{?} = 100$

$\Rightarrow ? = 100^2 = 10000$

11. Ans. D.

$$\dfrac{P×9×4}{100} − \dfrac{P×12×2}{100} = 480$$

$$\Rightarrow \dfrac{36P}{100} − \dfrac{24P}{100} = 480$$

$$\Rightarrow P = 4000$$

12. Ans. A.

the average age of the remaining boys in the class be a years, then
$15 × 80 = 15 × 16 + 25 × 14 + (80 − 15 − 25) × a$
$\Rightarrow 1200 = 240 + 350 + 40a$
$\Rightarrow a = 15.25$

13. Ans. D.

Ratio of profit = 12500 : 8500 = 125 : 85 = 25 : 17
Let the profit received by them be 25x and 17x respectively.
Now, difference in the profit = 25x - 17x = Rs. 240
$\Rightarrow 8x = Rs.240$
$\Rightarrow x = Rs.30$
40% of total profit = 42x = Rs. 1260
∴ Total profit (100%) = 1260 × (100/40) = Rs.3150

14. Ans. D.

Ratio of length and breadth is 6 : 5, then
Let length = 6x and breadth = 5x
Area = l × b = 6x × 5x = $30x^2$
Perimeter = 2 (l + b) = 2(6x + 5x) = 22x

$$\dfrac{30x^2}{22x} = \dfrac{60}{11}$$

$\Rightarrow x = 4$
∴ Length = 6x = 6 × 4 = 24 units

15. Ans. C.

Quantity I: Let 3 years ago the age of A and B be 3x and 4x years respectively, then

ATQ
(3x + 5) + (4x + 5) = 45
⇒ x = 5

Quantity I = Present age of A = 3x + 3 = 18 years

Quantity II: Let 5 year ago the age of P and Q be 3x and 4x years respectively, then ATQ
3x + 11 = 4x + 5

⇒ x = 6

Quantity II = Present age of P = 3x + 5 = 23 years

Hence   Quantity I < Quantity II

16. Ans. A.

Quantity I:
15% of Principal = 4800

Quantity I = Principal = Rs.32000

Quantity II:
Cumulative rate of 6% for 2 years
= 6+6+6*6/100 = 12.36%
12.36% of Principal =3708
Quantity II = Principle = Rs.30000

Hence   Quantity I > Quantity II

17. Ans. A.

Quantity I: Let the distance covered be d, then

ATQ

$$\frac{d}{(6-3)} - \frac{d}{(6+3)} = 8$$

Quantity I = d = 36 km

Quantity II: Let the distance covered be x, then
ATQ

$$\frac{x}{25-15} + \frac{x}{25+15} = 2$$

Quantity II = x = 16 km

Hence   Quantity I > Quantity II

18. Ans. B.

I. $x^2 - 11x + 28 = 0$
⇒ $x^2 - 7x - 4x + 28 = 0$
⇒ x (x − 7) −4(x − 7)=0
⇒ (x − 4)(x − 7)=0
⇒ x = 4, 7

II. $y^2 - 18y + 81 = 0$
⇒ $y^2 - 9y - 9y + 81 = 0$
⇒ y(y − 9) −9(y − 9) = 0
⇒ (y − 9)(y − 9) = 0
⇒ y = 9, 9

So, x < y.