

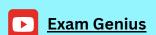
# QUANT SCORE BOOSTER

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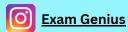


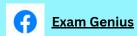














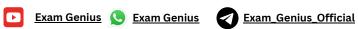
Wrong Number Series (5)	
Approximation (5)	
Quadratic Equations (5)	
Arithmetic (5)	
D.I.	

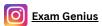
















# **Set 1- Wrong No. Series**

QI. 19, 36, 55, 77, 107, 138

- a) 19
- b) 77
- c) 36
- d) 55
- e) 107

Q2. 106, 53, 53, 77.5, 159, 397.5

- a) 159 b) 397.5
- c) 53
- d) 77.5
- e) 106

Q3. 111, 116, 123, 134, 150, 176

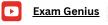
- a) 123
- b) 116
- c) | | |
- d) 134
- e) 150

Q4. 19, 21, 41, 61, 101, 162

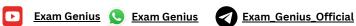
- a) 41
- b) 19
- c) 21
- d) 61
- e) 101

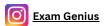
Q5. 110, 132, 156, 182, 210, 250

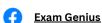
- a) 110 b) 132
- c) 156
- d) 182
- e) 250













# **Set 2- Approximation**

```
Q1. \sqrt{7224 + 45.11} * 3.99 \div 6.12 = x\% of 499.81
```

- a) 19
- b) 16
- c) 23
- d) 26
- e) 18

Q2. 
$$4\sqrt{x} = \sqrt{(1295)} - \sqrt{(575)} - \sqrt[3]{730}$$

- a) 81
- b) 16
- c) 256
- d) 625
- e) 1296

Q3. 
$$939.81 \div 4.87 - 39.87\%$$
 of  $284.93 = x + 311.86 \div 7.83$ 

- a) 22
- b) 35
- c) 24
- d) 23
- e) 28

Q4. 19.81% of 
$$3774.91 - 25.21\%$$
 of  $1680.08 = x\%$  of  $499.83$ 

- a) 13
- b) 18
- c) 67
- d) 24
- e) 20

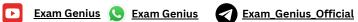
- a) 50
- b) 40
- c) 61
- d) 63
- e) 60

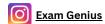




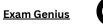














# **Set 3- Quadratic equations**

Q1. Equation 1:  $X^2 - 26X + 153 = 0$ 

Equation II: $Y^2 - 27Y + 162 = 0$ 

a. x>y b. y>x

c. x≤y d. x≥y

e. x=y, or no relation

Q2. Equation I: $X^2 - 34X + 289 = 0$ 

Equation II:  $Y^2 - 56Y + 784 = 0$ 

a. x>y b. y>x

d. x≥y c. x≤y

e. x=y, or no relation

Q3.Equation I:  $X^2 - 50X + 225 = 0$ 

Equation II: $Y^2 - 28Y + 147 = 0$ 

a. x>y b. y>x

d. x≥y c. x≤y

e. x=y, or no relation

Q4. Equation I:  $X^2 - 62X + 96I = 0$ 

Equation II:  $Y^2 - 68Y + 1156 = 0$ 

a. x > yb.  $x \ge y$ 

c. x < y  $d. x \leq y$ 

e. x = y or no relation

Q5. Equation I:  $X^2 = 1444$ 

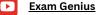
Equation II: Y = √361

a. x > y b.  $x \ge y$ 

c. x < y  $d. x \leq y$ 

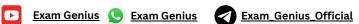
e. x = y, or no relation

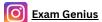


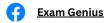














# **Set 4- Arithmetic Questions**

QI. The distance between point A and point B is 408 km. A train starts from station A at 9.00 AM and travels at a speed of 68 km/hr. After I hour, the train increases its speed by 25%, then moves till 11.00 AM. After 11.00 AM, the train increases its speed by 20%, then moves till 12.00 PM. After 12.00 PM, the train increases its speed by 'x'%, then moves till I.00 PM and then the train will reach station B. What is the value of 'x'?

बिंदु A और बिंदु B के बीच की दूरी 408 किमी है। एक ट्रेन सुबह 9.00 बजे स्टेशन A से शुरू होती है और 68 किमी/घंटा की गति से यात्रा करती है। I घंटे के बाद, ट्रेन अपनी गति 25% बढ़ा देती है, फिर II.00 बजे तक चलती है। पूर्वाह्न II.00 बजे के बाद, ट्रेन अपनी गति 20% बढ़ा देती है, फिर I2.00 बजे तक चलती है। दोपहर 12.00 बजे के बाद, ट्रेन अपनी गति 'x'% बढ़ा देती है, फिर दोपहर 1.00 बजे तक चलती है और फिर ट्रेन स्टेशन B पर पहुंच जाएगी। 'x' का मान क्या है?

a) 50%

b) 40%

c) 70%

d) 60%

e) None of these

Q2. 20 kg of item A cost Rs. 15 per kg, and 25 kg of item B cost Rs. 'x'. If item A and item B are sold at 20% and 10% profit, then the sum of the selling amounts of items A and B together is Rs. 910. Find the value of **'**x'.

20 किलो वस्तु A की लागत रु. I5 प्रति किग्रा, और 25 किग्रा वस्तु बी की कीमत रु. 'एक्स'। यदि वस्तु A और वस्तु B को 20% और 10% लाभ पर बेचा जाता है, तो वस्तु A और B की कुल बिक्री राशि का योग रु. 910. 'x' का मान ज्ञात कीजिए।

a) 18

b) 10

c) 15

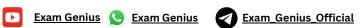
d) 20

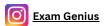
e) None of these

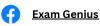
Q3. A cylindrical bag contains millet, and the height of that bag is 30 cm and the base radius is 14 cm. A cylindrical bag of millets is emptied till the floor, and a conical heap of millet is formed. If the base radius of a conical heap is 70 cm, then find the height of the conical heap.

एक बेलनाकार बैग में बाजरा है, और उस बैग की ऊंचाई 30 सेमी है और आधार त्रिज्या 14 सेमी है। बाजरे के एक बेलनाकार बैग को फर्श तक खाली कर दिया जाता है, और बाजरे का एक शंक्वाकार











ढेर बन जाता है। यदि किसी शंक्वाकार ढेर के आधार की त्रिज्या 70 सेमी है, तो शंक्वाकार ढेर की ऊंचाई ज्ञात कीजिए।

a) 3.6 cm

b) 4.8 cm

c) 3.2 cm

d) 3.8 cm

e) None of these

Q4. A boat moving in a circular path, whose radius is 14 km. The speed of the boat in Stillwater is 47 km/hr, and the stream speed is 3 km/hr. If the boat had travelled half of the circular path downstream and the rest upstream then find the total time taken by the boat to finish the journey on a circular path.

एक नाव वृत्ताकार पथ पर चल रही है, जिसकी त्रिज्या 14 किमी है। स्टिलवॉटर में नाव की गति 47 किमी/घंटा है, और धारा की गति 3 किमी/घंटा है। यदि नाव ने वृत्ताकार पथ का आधा भाग धारा के अनुकूल और शेष भाग धारा के प्रतिकूल तय किया है, तो वृत्ताकार पथ पर यात्रा समाप्त करने में नाव द्वारा लिया गया कुल समय ज्ञात कीजिए।

a) 1.22 hours

b) 1.44 hours

c) 1.88 hours

d) 2.22 hours

e) None of these

Q5. A bus travels 64 km at a speed of 80 km/hr and 72 km at a speed of 90 km/hr. Find the average speed of the bus.

एक बस 80 किमी/घंटा की गति से 64 किमी और 90 किमी/घंटा की गति से 72 किमी की यात्रा करती है। बस की औसत गति ज्ञात कीजिए।

a) 85 km/hr b) 82 km/hr

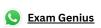
c) 84 km/hr

d) 87.5 km/hr

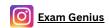
e) None of these

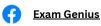














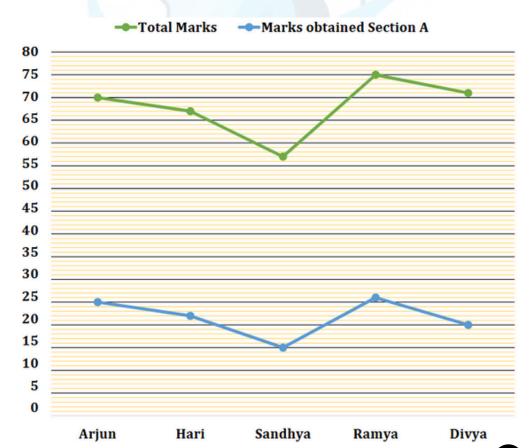
## **Set 5- D.I.**

#### **Directions:-**

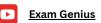
Read the data carefully and answer the following questions:- The following Line graph shows the total marks and marks in section A obtained by different students and the table shows Ratio of marks obtained from section B and Section C. The total mark is the sum of the three sections - A. B and C.

निर्देश: डेटा को ध्यान से पढें और निम्नलिखित प्रश्नों के उत्तर दें: - निम्नलिखित लाइन ग्राफ विभिन्न छात्रों द्वारा अनुभाग ए में प्राप्त कुल अंकों और अंकों को दर्शाता है और तालिका अनुभाग बी और अनुभाग सी से प्राप्त अंकों का अनुपात दिखाती है। कुल अंक तीन अनुभागों - ए, बी और सी का योग है।

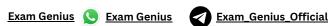
Students	Ratio of marks obtained from section B and Section C
Arjun	3:2
Hari	4:5
Sandhya	2:5
Ramya	3:4
Divya	8:9

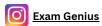


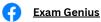














QI. The marks in section B obtained by Arjun is what percentage more than the marks in section C obtained by him? अर्जुन द्वारा अनुभाग बी में प्राप्त अंक उसके द्वारा अनुभाग सी में प्राप्त अंकों से कितने प्रतिशत अधिक हैं? a) 60% b) 50% c) 30% d) 150% e) None of these Q2. Find the difference between the marks obtained by Hari in section A and B. अनुभाग ए और बी में हरि द्वारा प्राप्त अंकों के बीच अंतर ज्ञात करें। b) 4 a) 6 c) 2 d) 3

e) None of these

Q3. Find the ratio of marks obtained by Sandhya in section A and C. अनुभाग ए और सी में संध्या द्वारा प्राप्त अंकों का अनुपात ज्ञात कीजिए।

a) 2:3

b) 4:5

c) 3:4

d) 1:2

e) None of these

Q4. Find the percentage of the marks in section B obtained by Ramya when compared to her total marks.

राम्या द्वारा अपने कुल अंकों की तुलना में अनुभाग बी में प्राप्त अंकों का प्रतिशत ज्ञात कीजिए।

a) 28%

b) 25%

c) 22%

d) 26%

e) None of these

Q5. Find the sum of the marks obtained by Divya in section A and B. सेक्शन ए और बी में दिव्या द्वारा प्राप्त अंकों का योग ज्ञात करें।

a) 45

b) 43

c) 46

d) 44

e) None of these









### **Answers**

### **Wrong Number Series**















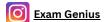
### **Approximation**

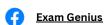
I)
$$\sqrt{(7225) + 45 * 4 \div 6} = x\% \text{ of } 500$$
  
85 + 30 = (x/100) \* 500  
II5 = 5x  
x = 23

2)
$$^{4}\sqrt{x} = \sqrt{(1296)} - \sqrt{(576)} - \sqrt[3]{729}$$
  
 $^{4}\sqrt{x} = 36 - 24 - 9$   
 $^{4}\sqrt{x} = 3$   
 $x = 3 * 3 * 3 * 3$   
 $x = 81$ 











### **Quadratic Equations**

1) 
$$X = 17, 9$$

$$Y = 18, 9$$

No relation can be established between 'X' and 'Y'

$$2)X = 17, 17$$

$$Y = 28, 28$$

$$3)X = 45, 5$$

$$Y = 21, 7$$

No relation can be established between 'X' and 'Y'

$$4)X = 31, 31$$

$$Y = 34, 34$$

$$Y = 19$$

No relation can be established between 'X' and 'Y'













### **Arithmetic Questions**

#### Answer I-

The initial speed of the train = 68 km/hr

From 9.00 AM to 10.00 AM distance travelled = 68 km

Speed of train (10.00 AM to 11.00 AM) = 125% of 65 = 85 km/hr

From 10.00 AM to 11.00 AM distance travelled = 85 km

Speed of train (II.00 AM to I2.00 AM) = 120% of 85 = 102 km/hr

From II.00 AM to I2.00 AM distance travelled = 102 km

Total distance travelled by train till 12.00 PM = 68 + 85 + 102 = 255

Remaining distance = 408 - 255 = 153 km

Then Speed of the train (12.00 PM to 1.00 PM) = 153/I = 153 km/hr

Thus x = [(153 - 102)/102] \* 100 = 50%

#### Answer 2-

$$120\%$$
 of  $(20 * 15) + 110\%$  of  $(25 * x) = 910$ 

Then

$$360 + 27.5x = 910$$

$$27.5x = 550$$

$$x = 20$$

#### Answer 3-

The volume of the conical heap = Volume of the cylindrical bag

$$(1/3) * \pi * r^2 * h = \pi * R^2 * H$$

Let

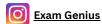
$$(1/3) * 70^2 * h = 14^2 * 30$$

$$h = 3.6 cm$$













Answer 4-

Circumference of the circle =  $2\pi r$ 

Total distance = 2 \* (22/7) \* 14 = 88

Speed of the boat in still water = 47 km/hr

Speed of the stream = 3 km/hr

Downstream speed = 47 + 3 = 50 km/hr

Upstream speed = 47 - 3 = 44 km/hr

Then

Total time taken = (44/50) + (44/44) = 0.88 + 1 = 1.88 hours

#### Answer 5-

Time taken of 64 km = 64/80 = 0.8 hr

Time taken of 72 km = 72/90 = 0.8 hr

Then Average speed = Total distance/Total time taken

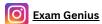
Average speed = (64 + 72)/(0.8 + 0.8) = 85 km/hr

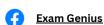














### D.I.

#### Answer I.

Total marks obtained by Arjun = 70 Marks obtained by Arjun in section A = 25Sum of the marks in section B and C = 70 - 25 = 45Marks obtained by Arjun in section B = (3/5) \* 45 = 27Marks obtained by Arjun in section C = (2/5) \* 45 = 18Percentage = (27 - 18/18) \* 100 = 50%

#### Answer 2.

Total marks obtained by Hari = 67 Marks obtained by Hari in section A = 22Sum of the marks in section B and C = 67 - 22 = 45Marks obtained by Hari in section B = (4/9) \* 45 = 20Required difference = 22 - 20 = 2

#### Answer 3.

Total marks obtained by Sandhya = 57 Marks obtained by Sandhya in section A = 15 Sum of the marks in section B and C = 57 - 15 = 42Marks obtained by Sandhya in section C = (5/7) \* 42 = 30Required ratio = 15:30=1:2

#### Answer 4.

Total marks obtained by Ramya = 75 Marks obtained by Ramya in section A = 26Sum of the marks in section B and C = 75 - 26 = 49Marks obtained by Ramya in section B = (3/7) \* 49 = 21Required ratio = (21/75) \* 100 = 28%

#### Answer 5.

Total marks obtained by Divya = 71 Marks obtained by Divya in section A = 20Sum of the marks in section B and C = 71 - 20 = 51Marks obtained by Divya in section B = (8/17) \* 51 = 24Sum of the marks obtained by Divya in section A and B = 20 + 24 = 44





