

SSC free sample placement paper question and answer, SSC Tier-1,2,3 Combined Graduate Level(Tier-I) Examination, 2013, Ministries/Deptt. of Govt. of India written examination on 14.04.2013 & 21.04.2013 Staff selection commission recruitment procedure written test examination pattern and Scheme of the examination for combined graduate level examination(Tier1,II and III)SSC stands for staff selection commission upcoming recruitment examination and test pattern SSC previous year model written test examination question paper and answer Previous question paper with solution, SSC written examination detailed analysis and detailed selection procedure and test pattern for upcoming recruitment exam Staff selection commission recruitment procedure written test examination pattern and Scheme of the examination for combined graduate level examination(Tier1,II and III). SSC Combined Graduate Level Examination (Tier-I)- 2013 Model Test Paper of Numerical Aptitude - Questions and explanations. SSC CGL Arithmetic Aptitude Question Paper free Sample Model Question Paper with answer and solution

1. $\frac{3}{5}$ th of a number is more than 40% of the same number by 35. What is 80% of that number ?
 a) 175
 b) 105
 c) 150
d) 140 (Ans)

2. The sum of two digits of a number is less than the number by 54. What is the difference between two digits of the number ?
 a) 2
 b) 4
 c) 6
d) Data inadequate (Ans)

3. In the equation given below which number (approx.) will replace the question mark ? $6.59 \times 149.36 + 159\% \text{ of } 1642 = 10000 - ?$
 a) 6800
 b) 7500
c) 6500 (Ans)
 d) 5500

4. The inequality of $b^2 + 8b \geq 9b + 14$ can be removed if -----
 a) $b \geq 5, b \leq -5$
b) $b \geq 5, b \leq -4$ (Ans)
 c) $b \geq 6, b \leq -6$
 d) $b \geq 4, b \leq -4$

Explanation : $b^2 + 8b - 9b - 14 \geq 0$
 $b^2 - b - 14 \geq 0$
 $b^2 - b + \frac{1}{4} \geq 14 + \frac{1}{4}$
 $(b - \frac{1}{2}) \geq \pm \sqrt{57/2}$
 $b \geq \frac{1 \pm \sqrt{57}}{2}$
 $\geq 4.28 \text{ or } -3.28$
 $\therefore b \geq 5 \text{ or } b \leq -4$

5. If the radius of the base and the height of a right circular cone are increased by 20%, then what is the approximate percentage increase in volume ?

- a) 60
- b) 68
- c) 73 (Ans)**
- d) 75

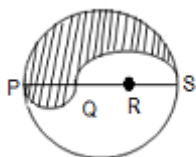
Explanation : $2a + b + \frac{a^2 + 2ab}{100} + \frac{a^2 b}{10000}$ (Here $a = 20 = b$)

$$= 2 \times 20 + 20 + \frac{(20)^2 + 2 \times 20 \times 20}{100} + \frac{(20)^2 \times 20}{10000}$$

$$= 40 + 20 + \frac{1200}{100} + \frac{8000}{10000}$$

$$= 72.8 = 73 \text{ (Approx.)}$$

6.



PQRS is a diameter of a circle of radius 6 cm as shown in the figure above. The lengths PQ, QR and RS are equal. Semi-circles are drawn on PQ and QS as diameters. What is the perimeter of the shaded region ?

- a) 12π (Ans)**
- b) 14π
- c) 16π
- d) 18π

7. In the equation given below, what (approx.) number will replace the question mark ?

$$162 \sqrt{7+18068} - 2 \text{ and } 1/7 \text{ of } 5162 = ?$$

- a) 7200
- b) 8700
- c) 9200
- d) 7600 (Ans)**

8. In the equation given below what will come in place of question mark ? $5672 + 3805 = ? + 39846$

- a) 21615
- b) 20031
- c) 219751
- d) 20751 (Ans)**

9. When 40% of a certain number is added in an other number, then the second number is increased by its 60%. What is the ratio between the two numbers ?

- a) 3:2 (Ans)**
- b) 2:3
- c) 3:4
- d) Data inadequate

10. The average marks of 55 students of a class is 60. The average marks of passed students is 70 and the average marks of failed students is 45. What is the number of failed students ?

- a) 33
- b) 22 (Ans)**
- c) 28
- d) Data inadequate

Directions (Q.11-15) Each of the question below consists of a question and three statements numbered I, II and III. You have to decide which of the statements are sufficient to answer the question.

11. What will be difference between the ages of P and Q after 6 years ?

- (i) The ratio between the present ages of P and Q is 3:5
- (ii) The ratio between the present age of P and his age after 6 years is 3:4
- (iii) The ratio between the present age of Q and his age after 6 years is 5:6

a) Any two of the above statements together are necessary (Ans)

- b) All the three statements together are necessary
- c) Only (i) and (ii) together are necessary
- d) Only (i) and (iii) together are necessary

Explanation : The equations from the three given statements are :

$$\frac{P}{Q} = \frac{3}{5} \quad \text{----(i)}$$

$$\frac{P}{P+6} = \frac{3}{4} \quad \text{----(ii)}$$

and

$$\frac{Q}{Q+6} = \frac{5}{6} \quad \text{----(iii)}$$

∴ From any two equations the value of P and Q can be determined and then their difference can be calculated .

12. What is the speed of moving train ?

- (i) This train crosses another train coming from opposite direction in 72 seconds
- (ii) The length of the first train is 100 metres
- (iii) The length of the second train is 180 metres

- a) All the three statements together are necessary
- b) All the three statements together are not sufficient (Ans)**
- c) Only (ii) and (iii) together are necessary
- d) Only (i) and (ii) together are necessary

Explanation : As the speed of first train is not given, so the speed of second train cannot be found

13. What was Q's share in the money ?

- a) P received Rs.1200 more than R
- b) Q received Rs.800 more than P
- c) R received Rs.1600
- a) Only statements (i) and (ii) together are necessary
- b) Statements (i) and (ii) or (iii) are necessary
- c) All the three statements together are necessary (Ans)**
- d) All the three statements together are not sufficient

Explanation : The equations from the given statements are : $R = 1600$
 $P - R = 1200$
 and $Q - P = 800$

∴ In order to find the value of Q, all the equations are necessary.

14. What sum of money did Prakash borrow from Arun ?

- (i) Arun received Rs.6400 from Prakash after 8 years as S.I.
- (ii) Prakash invested 50% of the borrowed money and received Rs.8000 in return of this investment
- (iii) Total S.I. after 4 years was 20% of the total sum of money
- a) Only statements (i) and (ii) together are necessary
- b) Only statements (i) and (iii) together are necessary (Ans)**
- c) All the three statements together are necessary
- d) All the three statements together are not sufficient

Explanation : From statement (i) $6400 = \frac{X \times 8 \times r}{100}$

Hence, the value x can be obtained from statements (i) and (iii)

15. What profit per cent did Arun earn by selling his car ?
- (i) Instead of purchasing a motor cycle Arun purchased a car and paid Rs.60000
 - (ii) Arun has purchased his motor cycle for Rs.25000
 - (iii) Arun sold his car for Rs.1,10,000
 - a) Only (i) and (ii) are necessary
 - b) Only (ii) and (iii) are necessary
 - c) All the three statements together are necessary (Ans)**
 - d) All the three statements together are not sufficient