SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 8 September 2016" Evening Shift (Quantitative Aptitude)

EXAM DATE : 8-September-2016

EXAM START TIME : 16:15:00

EXAM NAME : SSC Examination 2016

Question 51.

$$The\ value\ of \sqrt{9 + 2\sqrt{16} + 3\sqrt{512}}\ is$$

Options:

1) 6

2) 5

3) 2√8

4) 3√6

Correct Answer: 5

Question 52.The lengths of diagonals of a rhombus are 24cm and 10cm the perimeter of the rhombus (in cm) is :

Options:

1) 52

2) 56

3) 68

4) 72

Correct Answer: 52

Question 53.A dishonest shopkeeper professes to sell goods at his cost price but uses a false weight of 950 gms, for each kilogram. His gain percentage is

Options:

1)

$6\frac{1}{4}\%$

2)

$5\frac{5}{19}\%$

3)

$5\frac{3}{17}\%$

4)

$6\frac{2}{7}\%$

Correct Answer:

$5\frac{5}{19}\%$

Question 54.Ratio of A's age to B's age is 4:3. 'A' will be 26 years old after 6 years. The age of B now is

Options:

1)

$19\frac{1}{2}$ years

2) 12 years

3) 21 years

4) 15 years

Correct Answer: 15 years

Question 55.If the Arithmetic mean of 7, 5, 13, x and 9 is 10, then the value of x is

Options:

1) 10

2) 12

3) 14

4) 16

Correct Answer: 16

Question 56.A man sells an article at 15% profit. If he had sold it for ₹ 6 more, he would have gained 18%. The man bought the article for

Options:

1) 100

2) 150

3) 200

4) 250

Correct Answer: 200

Question 57.A's salary was decreased by 50% and subsequently increased by 50%. How much percent does he lose?

Options:

1) 25%

2) 50%

3) $12\frac{1}{2}\%$

4) No loss

Correct Answer: 25%

Question 58.A car moving in the morning fog passes a man walking at 4km/h. in the same direction. The man can see the car for 3 minutes and visibility is upto a distance of 130m. The speed of the car is :

Options:

1) $7\frac{3}{5}$ km/h.

2) $6\frac{3}{5}$ km/h.

3) 7km/h.

4) 5km/h.

Correct Answer:

$6\frac{3}{5}$ km/h.

Question 59.A money lender lends Rs. 400 for 3 years to a person and lends Rs. 500 for 4 years to the other person at the same rate of simple interest. If altogether he receives Rs. 160 as interest, what is the rate of interest per annum ?

Options:

1) 5%

2) 7%

3) 9%

4) 10%

Correct Answer: 5%

Question 60.If $x = 1/(\sqrt{2}+1)$ then the value of $x^2 + 2x - 1$ is

Options:

1) $2\sqrt{2}$

2) 4

3) 0

4) 2

Correct Answer: 0

Question 61.If $x + 1/x = \sqrt{13}$, then $3x/(x^2-1)$ equal to

Options:

1) $3\sqrt{13}$

2) $\sqrt{13}/3$

3) 1

4) 3

Correct Answer: 1

Question 62.O is an centre of a circle. P is an external point of it at distance of 13cm from O. The radius of the circle is 5cm. Then the length of a tangent to the circle from P upto the point of contact is

Options:

1) $\sqrt{194}$cm

2) 10cm

3) 12cm

4) 8cm

Correct Answer: 12cm

Question 63.If θ is acute angle and $\sin(\theta+18°)= 1/2$, then the value of θ in circular measure is

Options:

1) Π/12 radians

2) Π/15 radians

3) 2Π/5 radians

4) 3Π/13 radians

Correct Answer: Π/15 radians

Question 64.18 men or 36 boys working 6 hours a day can plough a field in 24 days. In how many days will 24 men and 24 boys working 9 hours a day plough the same field ?

Options:

1) 9

2) 10

3) 6

4) 8

Correct Answer: 8

Question 65.If a(x + y) = b(x - y) = 2ab, then the value of $2(x^2 + y^2)$ is

Options:

1) $2(a^2 - b^2)$

2) $2(a^2 + b^2)$

3) $4(a^2 - b^2)$

4) $4(a^2 + b^2$

Correct Answer: $4(a^2 + b^2)$

Question 66.If $x + 1/x = 6$, then value of $x^2 + 1/x^2$ is

Options:

1) 23

2) 16

3) 34

4) 32

Correct Answer: 3

Question 67.G is the centroid of the equilateral triangle ABC, if AB = 9cm then AG is equal to

Options:

1) $3\sqrt{3}$cm

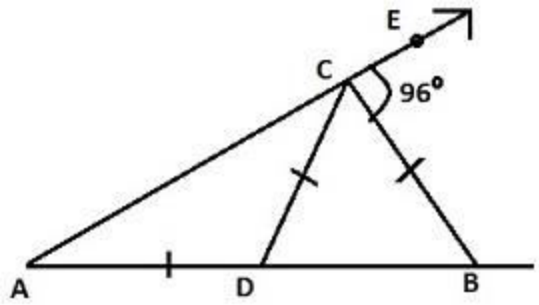
2) 3cm

3) $3\sqrt{3}/2$cm

4) 6cm

Correct Answer: $3\sqrt{3}$cm

Question 68.In the figure (not drawn to scale) given below, if AD = DC = BC and ∠BCE = 96°,then ∠DBC is



Options:

1) 32°

2) 84°

3) 64°

4) 96°

Correct Answer: 64°

Question 69.If θ is positive acute angle and 4sin2θ = 3, then the value of tan θ - cot θ/2 is

Options:

1) 1

2) 0

3) √3

4) 1/√3

Correct Answer: 0

Question 70.The chord AB of a circle of centre O subtends an angle θ with the tangent at A to the circle. Then measure of∠ABO is

Options:

1) θ

2) 90° - θ

3) 90° + θ

4) 2 (180° - θ)

Correct Answer: 90° - θ

Question 71.From a point on a bridge across the river, the angles of depression of the banks on opposite sides of the river are 30° and 45° respectively. If the bridge is at a height of 2.5m from the banks, then the width of the river is (take √3 = 1.732)

Options:

1) 5.83m

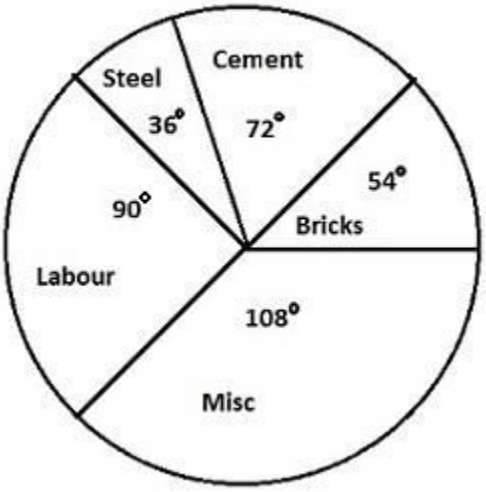
2) 6.83m

3) 5.76m

4) 6.87m

Correct Answer: 6.83m

Question 72.The pie-chart given below show usage of materials in a construction of a house. Study the chart and answers the questions :



The percentage of steel used in the construction of a house

Options:

1) 10%

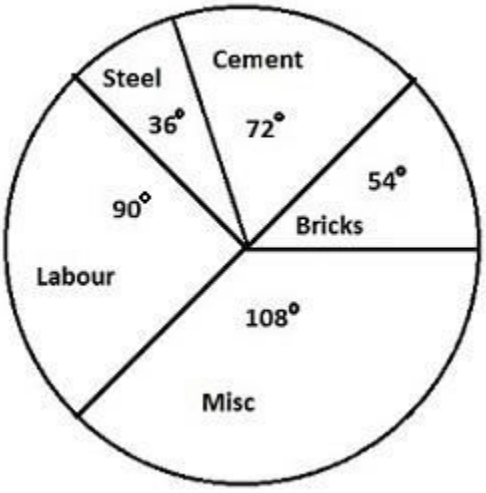
2) 12%

3) 20%

4) 36%

Correct Answer: 10%

Question 73.The pie-chart given below show usage of materials in a construction of a house. Study the chart and answers the questions :



The ratio of cement and bricks used in the construction is

Options:

1) 3:4

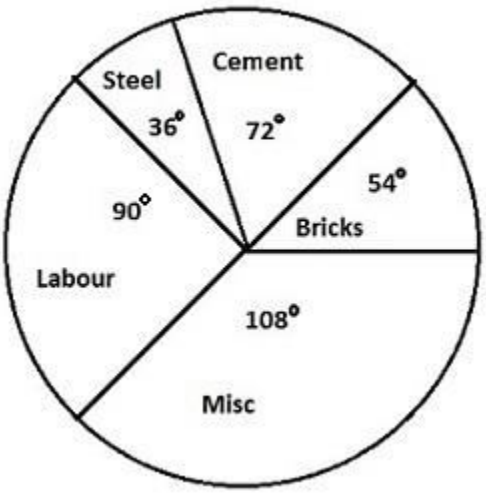
2) 2:3

3) 4:3

4) 2:5

Correct Answer: 4:3

Question 74.The pie-chart given below show usage of materials in a construction of a house. Study the chart and answers the questions :



If the cost of cement is ₹ 5000/- then the labour cost is

Options:

1) 5500

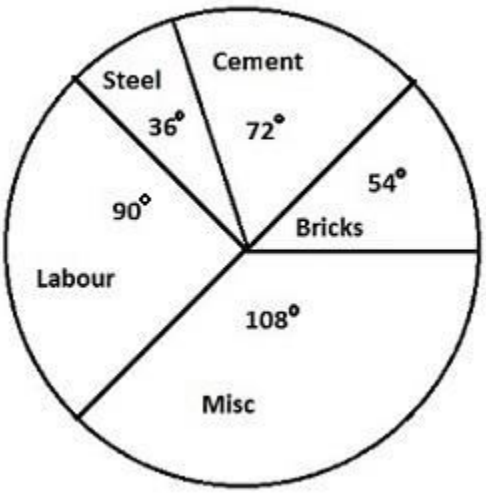
2) 6250

3) 9000

4) 4000

Correct Answer: 6250

Question 75.The pie-chart given below show usage of materials in a construction of a house. Study the chart and answers the questions :



The average of percentages of steel, cement and miscellaneous items used in the construction is

Options:

1) 10%

2) 25%

3) 20%

4) 35%

Correct Answer: 20%