

SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 3 September 2016" Morning Shift (Quantitative Aptitude)

EXAM DATE : 3-September-2016

EXAM START TIME : 10:00:00

EXAM NAME : SSC Examination 2016

Question 51.If 100 cats kill 100 mice in 100 days, then 4 cats would kill 4 mice in how many days?

Options:

- 1) 4 days
- 2) 3 days
- 3) 40 days
- 4) 100 days

Correct Answer: 100 days

Question 52.

In $\triangle ABC$, $DE \parallel BC$ such that $\frac{AD}{BD} = \frac{3}{5}$. If AC = 5.6 cm, then AE is equal to

Options:

- 1) 4.2 cm
- 2) 3.1 cm
- 3) 2.8 cm
- 4) 2.1 cm

Correct Answer: 2.1 cm

Question 53.If two circles touch each other internally. The greater circle has its radius as 6 cm and the distance between the centres of the circles is 2 cm. The radius of the other circle is

Options:

- 1) 3 cm
- 2) 4 cm
- 3) 2 cm
- 4) 5 cm

Correct Answer: 4 cm

Question 54.An office opens at 10 AM and closes at 5 PM. The lunch interval is 30 minutes. The ratio of lunch interval to the total period of office hours is

Options:

- 1) 1:7

2) 1:14

3) 7:1

4) 14:1

Correct Answer: 1:14

Question 55.A Bookseller allowed 15% discount on the books sold. Sunil purchased books worth Rs.1500. How much will he have to pay to Bookseller.

Options:

1) Rs.1200

2) Rs.1250

3) Rs.1275

4) Rs.1300

Correct Answer: Rs.1275

Question 56.If the ratio between the profit and sale price of an article is 1:5, then the ratio between the sale price and the cost price of that article is:

Options:

1) 3:2

2) 4:3

3) 5:4

4) 6:5

Correct Answer: 5:4

Question 57.What percent of 1 day is 36 minutes?

Options:

1) 25%

2) 2.5%

3) 3.6%

4) 0.25%

Correct Answer: 2.5%

Question 58.

A car covers a certain distance in 25 hrs. If it reduces the speed by $\frac{1}{5}$ th, the car covers 200 km less in that time. The speed of car is

Options:

1) 60 km/hr

2) 30 km/hr

3) 40 km/hr

4) 50 km/hr

Correct Answer: 40 km/hr

Question 59. At what percent of simple interest will a sum of money double itself in 15 years?

Options:

1)

$6\frac{1}{3}\%$

2)

$6\frac{2}{3}\%$

3)

$6\frac{1}{2}\%$

4) 6%

Correct Answer:

$6\frac{2}{3}\%$

Question 60.

$\frac{1}{\sqrt{a}} - \frac{1}{\sqrt{b}} = 0$, then the value of $\frac{1}{a} + \frac{1}{b}$ is:

Options:

1)

$\frac{1}{\sqrt{ab}}$

2)

\sqrt{ab}

3)

$\frac{2}{\sqrt{ab}}$

4)

$\frac{1}{2\sqrt{ab}}$

Correct Answer:

$\frac{2}{\sqrt{ab}}$

Question 61.If $x^2+y^2+z^2 = 14$ and $xy + yz + zx = 11$, then the value of $(x+y+z)^2$ is

Options:

- 1) 16
- 2) 25
- 3) 36
- 4) 49

Correct Answer: 36

Question 62.

If $\sqrt{2} \tan 2\theta = \sqrt{6}$ and $0^\circ < \theta < 45^\circ$, then the value of $\sin \theta + \sqrt{3} \cos \theta - 2 \tan^2 \theta$ is

Options:

- 1) $\frac{2}{3}$
- 2) $\frac{4}{3}$
- 3) 2
- 4) $\frac{8}{3}$

Correct Answer: $\frac{4}{3}$

Question 63.A positive number when decreased by 4, is equal to 21 times the reciprocal of this number.

The number is:

Options:

- 1) 3
- 2) 7
- 3) 5
- 4) 9

Correct Answer: 7

Question 64.

If $\tan \alpha = 2$, then the value of $\frac{\sin \alpha}{\sin^3 \alpha + \cos^3 \alpha}$ is

Options:

- 1) $\frac{2}{9}$
- 2) $\frac{\sqrt{5}}{9}$
- 3) $\frac{10}{9}$

4)
 $\frac{5\sqrt{5}}{9}$

Correct Answer:

$\frac{10}{9}$

Question 65.

If $x = \sqrt[3]{28}$, $y = \sqrt[3]{27}$, then the value of $x + y - \frac{1}{x^2+xy+y^2}$ is

Options:

- 1) 8
- 2) 7
- 3) 6
- 4) 5

Correct Answer: 6

Question 66.

If $x = 12$ and $y = 4$, then the value of $(x + y)^{\frac{x}{y}}$ is

Options:

- 1) 48
- 2) 1792
- 3) 4096
- 4) 570

Correct Answer: 4096

Question 67.In a triangle PQR, PQ = PR and $\angle Q$ is twice that of $\angle P$. Then $\angle Q$ is equal to

Options:

- 1) 72°
- 2) 36°
- 3) 144°
- 4) 108°

Correct Answer: 72°

Question 68.If the length of a chord of a circle is 16 cm and is at a distance of 15 cm from the centre of the circle, then the radius of the circle (in cm) is:

Options:

- 1) 15
- 2) 16
- 3) 17
- 4) 34

Correct Answer: 17

Question 69. On 24th May 2008 the maximum temperature of Delhi, Kolkata and Mumbai were recorded as 35°C, 33°C and 34°C respectively. What was the maximum temperature of Chennai so that the average maximum temperature of those cities would be 35°?

Options:

- 1) 34° C
- 2) 35° C
- 3) 36° C
- 4) 38° C

Correct Answer: 38° C

Question 70. The diameter of a sphere is twice the diameter of another sphere. The curved surface area of the first and the volume of the second are numerically equal. The numerical value of the radius of the first sphere is

Options:

- 1) 3
- 2) 24
- 3) 8
- 4) 16

Correct Answer: 24

Question 71. The thread of a kite makes 60° angle with the horizontal plane. If the length of the thread be 80 m, then the vertical height of the kite will be

Options:

- 1)
 $\frac{40}{\sqrt{3}}m$
- 2)
 $80\sqrt{3}m$
- 3)
 $80m$
- 4)
 $40\sqrt{3}m$

Correct Answer:

$40\sqrt{3}m$

Question 72. Study the pie chart carefully and answer the questions. The pie chart represents the percentage of people involved in various occupations. Total number of people = 2000



How many more people are involved in service than in trade ?

Options:

- 1) 3660
- 2) 2660
- 3) 1660
- 4) 660

Correct Answer: 2660

Question 73. Study the pie chart carefully and answer the questions. The pie chart represents the percentage of people involved in various occupations. Total number of people = 20000



The ratio of the people involved in service to that of industry is

Options:

- 1) 1:2
- 2) 2:3

3) 3:4

4) 3:2

Correct Answer: 2:3

Question 74. Study the pie chart carefully and answer the questions. The pie chart represents the percentage of people involved in various occupations. Total number of people = 20000



The sectorial angle made by the people involved in service in the given pie-chart is

Options:

1) 36°

2) 90°

3) 72°

4) 108°

Correct Answer: 72°

Question 75. Study the pie chart carefully and answer the questions. The pie chart represents the percentage of people involved in various occupations. Total number of people = 20000



The difference between the maximum number of people involved and minimum number of people involved in various professions is

Options:

1) 2640

2) 3640

3) 6320

4) 5320

Correct Answer: 5320