

## **SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 28 August 2016" Evening Shift (Quantitative Aptitude)**

**Question 51.**The sum of three consecutive natural numbers each divisible by 5, is 225. The largest among them is

**Options:**

- 1) 85
- 2) 75
- 3) 70
- 4) 80

**Correct Answer:** 80

**Question 52.**A can do a piece of work in 18 days. He worked at it for 12 days and B finished the remaining work in 8 days. B alone can do the whole work in

**Options:**

- 1) 16 days
- 2) 24 days
- 3) 28 days
- 4) 29 days

**Correct Answer:** 24 days

**Question 53.**The list price of an article is Rs. 900. It is available at two successive discounts of 20% and 10% . The selling price of the article is:

**Options:**

- 1) Rs. 640
- 2) Rs. 648
- 3) Rs. 540
- 4) Rs. 548

**Correct Answer:** Rs. 648

**Question 54.**A man spends a part of his monthly income and saves the rest. The ratio of his expenditure to the saving is 61 : 6. If his monthly income is Rs.8710, the amount of his monthly savings is

**Options:**

- 1) Rs.870
- 2) Rs.690

3) Rs.980

4) Rs.780

**Correct Answer:** Rs.780

**Question 55.**An article was sold at Rs. 950 allowing 5% discount on the marked price. The marked price of the article is

**Options:**

1) Rs. 960

2) Rs. 1000

3) Rs. 955

4) Rs. 945

**Correct Answer:** Rs. 1000

**Question 56.**A person loses 75% of his money in the first bet, 75% of the remaining in the second and 75% of the remaining in the third bet and returns home with Rs. 2 only. His initial money was

**Options:**

1) Rs. 64

2) Rs. 128

3) Rs. 256

4) Rs. 512

**Correct Answer:** Rs. 128

**Question 57.**The time taken by a train 160 m long, running at 72 km/hr, in crossing an electric pole is

**Options:**

1) 8 sec

2) 9 sec

3) 6 sec

4) 4 sec

**Correct Answer:** 8 sec

यदि  $x + \frac{1}{9x} = 4$ , हो तो  $9x^2 + \frac{1}{9x^2}$  का मान क्या होगा ?

**Question 58.**

**Options:**

1) 140

2) 142

3) 144

4) 146

**Correct Answer:** 142

**Question 59.** If  $a = 2$ ,  $b = -3$  then the value of  $27a^3 - 54a^2b + 36ab^2 - 8b^3$  is

**Options:**

1) 1562

2) 1616

3) 1676

4) 1728

**Correct Answer:** 1728

**Question 60.** Possible length of the three sides of a triangle are :-

**Options:**

1) 2 cm, 3 cm, 6 cm

2) 3 cm, 4 cm, 5 cm

3) 2.5 cm, 3.5 cm, 6 cm

4) 4 cm, 4 cm, 9 cm

**Correct Answer:** 3 cm, 4 cm, 5 cm

**Question 61.** AD is the Median of  $\Delta ABC$ . If O is the centroid and  $AO = 10$  cm then OD is

**Options:**

1) 5 cm

2) 20 cm

3) 10 cm

4) 30 cm

**Correct Answer:** 5 cm

**Question 62.** If in a triangle ABC,  $\sin A = \cos B$  then the value of  $\cos C$  is

**Options:**

1)

$\sqrt{3}/2$

2) 0

3) 1

4)

$1/\sqrt{2}$

**Correct Answer:** 0

**Question 63.** Incentre of  $\Delta ABC$  is I.  $\angle ABC = 90^\circ$  and  $\angle ACB = 70^\circ$ .  $\angle AIC$  is

**Options:**

- 1)  $115^\circ$
- 2)  $100^\circ$
- 3)  $110^\circ$
- 4)  $105^\circ$

**Correct Answer:**  $110^\circ$

**Question 64.** The length of the two adjacent sides of a rectangle inscribed in a circle are 5 cm and 12 cm respectively. Then the radius of the circle will be

**Options:**

- 1) 6 cm
- 2) 6.5 cm
- 3) 8 cm
- 4) 8.5 cm

**Correct Answer:** 6.5 cm

**Question 65.** If  $\sin\theta \times \cos\theta = \frac{1}{2}$ . The value of  $\sin\theta - \cos\theta$  is where  $0^\circ < \theta < 90^\circ$

**Options:**

- 1) 0
- 2)  $\sqrt{2}$
- 3) 2
- 4) 1

**Correct Answer:** 0

**Question 66.** The mean of 100 observations was calculated as 40. It was found later on that one of the observations was misread as 83 instead of 53. The correct mean is:

**Options:**

- 1) 39
- 2) 39.7
- 3) 40.3
- 4) 42.7

**Correct Answer:** 39.7

**Question 67.** If  $a^3 + \frac{1}{a^3} = 2$ , then value of  $\frac{a^2+1}{a}$  is (a is a positive number)

**Options:**

- 1) 1
- 2) 2
- 3) 3
- 4) 4

**Correct Answer: 2**

यदि  $x(3 - \frac{2}{x}) = \frac{3}{x}$ , हो तो  $x^2 + \frac{1}{x^2}$  का मान क्या है ?

**Question 68.**

**Options:**

1)

$$3 \frac{1}{9}$$

2)

$$3 \frac{2}{9}$$

3)

$$2 \frac{1}{9}$$

4)

$$2 \frac{4}{9}$$

**Correct Answer: 4**

**Question 69.** A sphere of radius 5 cm is melted to form a cone with base of same radius. The height (in cm) of the cone is

**Options:**

1) 5

2) 10

3) 20

4) 22

**Correct Answer: 20**

**Question 70.** The difference between compound interest and simple interest on a certain sum of money for 2 years at 5% per annum is Rs. 41. What is the sum of money?

**Options:**

1) Rs.7200

2) Rs.9600

3) Rs.16400

4) Rs.8400

**Correct Answer:** Rs.16400

**Question 71.**A man standing on the bank of river observes that the angle subtended by a tree on the opposite bank is  $60^\circ$ . When he retires 36 m from the bank, he finds that the angle is  $30^\circ$ . The breadth of the river is

**Options:**

1) 15 m

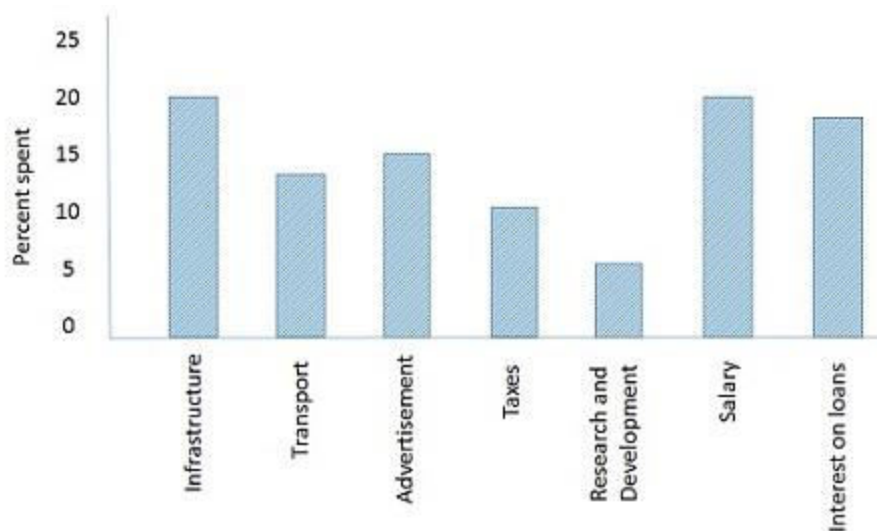
2) 18 m

3) 16 m

4) 11 m

**Correct Answer:** 18 m

**Study the bar-graph given below which shows the % distribution of total expenditures of a company under various expense and answer the questions.**



**Question 72.** The expenditures on the interest on loans is more than the expenditures on transport by

**Options:**

1) 5%

2) 10%

3) 40%

4) 30%

**Correct Answer:** 40%

**Question 73.** If the interest on loans amounted to ₹ 2.45 crores, then the total amount of expenditure on advertisement, taxes and research & development is:

**Options:**

- 1) 7 Crores
- 2) 4.2 Crores
- 3) 5.4 Crores
- 4) 3 Crores

**Correct Answer:** 4.2 Crores

**Question 74.** The ratio of the total expenditure on infrastructure and transport to the total expenditure on taxes and interest on loans is:

**Options:**

- 1) 5:4
- 2) 8:7
- 3) 9:7
- 4) 13:11

**Correct Answer:** 13:11

**Question 75.** If the total expenditure of the company is Rs. 20 crores, then the ratio of expenditure on transport to that on salary is

**Options:**

- 1) 5:4
- 2) 4:5
- 3) 5:8
- 4) 8:5

**Correct Answer:** 5:8