SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 29 August 2016" Morning Shift (Quantitative Aptitude)

Question 52. The price of a shirt after 15% discount, is Rs.119. What was the marked price of the shirt before discount

Options:

1) Rs.129

2) Rs.140

3) Rs.150

4) Rs.160

Correct Answer: Rs.140

Question 53.

If $\dfrac{a}{q-r} + \dfrac{b}{r-p} - \dfrac{c}{p-q}$, find the value of pa + qp + rc is

Options:

1) 0

2) 1

3) 2

4) -1

Correct Answer: 0

Question 54. The average of a,b,c is 20 and that of b,c,d is 25; if d=30, then the value of a is

Options:

1) 25

2) 45

3) 30

4) 15

Correct Answer: 15

Question 55.A store sells a watch for a profit of 25% of the cost. Then the percentage of profit against selling price is

Options:

1) 22%

2) 20%

3) 18%

4) 15%

Correct Answer: 20%

Question 56. If A is equal to 20% of B and B is equal to 25% of C; then what percent of C is equal to A?

Options:

1) 10

2) 15

3) 5

4) 20

Correct Answer: 5

Question 57.A gun is fired at a distance of 1.7 km from Ram and he hears the sound after 25 seconds. The speed of sound in meter per second is

Options:

1) 60

2) 62

3) 64

4) 68

Correct Answer: 68

Question 58.A sum of ₹ 3000 yields an interest of ₹ 1080 at 12% per annum simple interest in how many years ?

Options:

1) 4 Years

2) 3 Years

3) 5 years

4) 2½ Years

Correct Answer: 3 Years

Question 59.

The simplest value of $\dfrac{3\sqrt{8}-2\sqrt{12}+\sqrt{20}}{3\sqrt{18}-2\sqrt{27}+\sqrt{45}}$ is

Options:

1)

$\dfrac{3}{2}$

2) ⅔

3) ⅓

4) 2

Correct Answer: ⅔

Question 60.

If $\left(a + \dfrac{1}{a}\right)^2 = 3$, the value of $a^3 + \dfrac{1}{a^3}$ is

Options:

1) 0

2)

$$3\left(a + \dfrac{1}{a}\right)$$

3)

$$3\left(a^2 + \dfrac{1}{a^2}\right)$$

4) 1

Correct Answer: 0

Question 61.

If $\dfrac{a^2+b^2}{c^2} = \dfrac{b^2+c^2}{a^2} = \dfrac{c^2+a^2}{b^2} = \dfrac{1}{k}$, $(k \neq 0)$ then $k =$

Options:

1) 2

2) 1

3) 0

4) ½

Correct Answer: ½

Question 62. The area of the largest triangle that can be inscribed in a semicircle of radius 6m

is

Options:

1) 36 m²

2) 72 m²

3) 18 m²

4) 12 m²

Correct Answer: 36 m2

Question 63.

The value of $\dfrac{\sin\theta}{1+\cos\theta} + \dfrac{\sin\theta}{1-\cos\theta}$ is

Options:

1) 2sinθ

2) 2cosθ

3) 2secθ

4) 2cosecθ

Correct Answer: 2cosecθ

Question 64. Twenty women can do a work in sixteen days. Sixteen men can complete the same work in fifteen days. The ratio between the capacity of a man and a woman is

Options:

1) 3:4

2) 4:3

3) 5:3

4) 5:7

Correct Answer: 4:3

Question 65.

If $2x + \dfrac{2}{9x} = 4$, then the value of $27x^3 + \dfrac{1}{27x^3}$ is

Options:

1) 180

2) 198

3) 234

4) 252

Correct Answer: 198

Question 66. In a cyclic quadrilateral ABCD ∠BCD=120° and passes through the centre of the circle. Then ∠ABD = ?

Options:

1) 30°

2) 40°

3) 50°

4) 60°

Correct Answer: 30°

Question 67.The midpoints of AB and AC of a triangle ABC are X and Y respectively. If BC+XY=12 units, then BC-XY is

Options:

1) 10 units

2) 8 units

3) 6 units

4) 4 units

Correct Answer: 4 units

Question 68.In an isosceles ΔABC, AD is the median to the unequal side meeting BC at D. DP is the angle disector of ∠ADB and PQ is drawn parallel to BC meeting AC at Q. Then the maeasure of ∠PDQ is

Options:

1) 130°

2) 90°

3) 180°

4) 45°

Correct Answer: 90°

Question 69.129 meter from the foot of a cliff on level of ground, the angle of elevation of the top of a cliff is 30°. The height of this cliff is

Options:

1) 50√3 metre

2) 45√3 metre

3) 43√3 metre

4) 47√3 metre

Correct Answer: 43√3 metre

Question 70.The volume of metallic cylindrical pipe of uniform thickness is 748 c.c. Its length is 14 cm and its external radius is 9 cm. The thickness of the pipe is

Options:

1) 0.5 cm

2) 1.5 cm

3) 1 cm

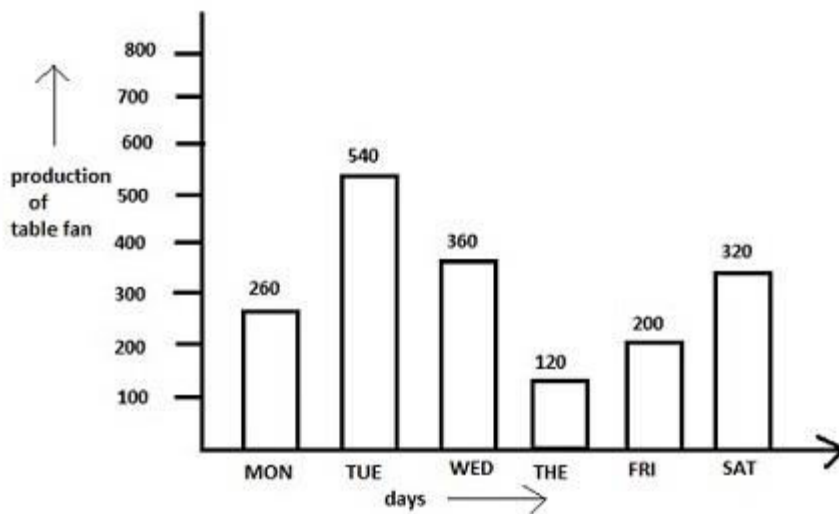**4)** 2 cm

Correct Answer: 1 cm

Question 71.

If $\tan\theta = \dfrac{8}{15}$, the value of $\dfrac{\sqrt{1-\sin\theta}}{\sqrt{1+\sin\theta}}$ is

Options:

1) ⅕

2) 2/5

3) ⅗

4) 0

Correct Answer: ⅗

The bar graph shows the production of table fans in a factory during one week. Study the bar graph and answer the question.

Question 72. The maximum production exceeds the minimum production by:

Options:

1) 400

2) 420

3) 500

4) 540

Correct Answer: 420

Question 73. The average production of table fan in that week is

Options:

1) 370

2) 280

3) 300

4) 250

Correct Answer: 300

Question 74. Ratio of the total production of table fans in the factory from Monday to Wednesday to that from Thursday to Saturday is

Options:

1) 19:26

2) 26:19

3) 29:16

4) 16:29

Correct Answer: 29:16

Question 75. The average production of table fans on Monday & Tuesdays exceeds the average production of table fans during the week by

Options:

1) 150 fans

2) 100 fans

3) 140 fans

4) 200 fans

Correct Answer: 100 fans