SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 27 August 2016" Morning Shift (Quantitative Aptitude)

Question 51.A clock gains 15 minutes per day. If it is set right at 12 noon, the time it shows at 4 AM is

Options:

1) 4.20 AM

2) 4.30 AM

3) 4.02 AM

4) 4.10 AM

Correct Answer: **4.10 AM**

Question 52.A home theatre set is Rs. 4950. If two successive discounts of 20% and 15% are given, then its selling price is

Options:

1) Rs.3366

2) Rs.6633

3) Rs.3636

4) Rs.6363

Correct Answer: **Rs.3366**

Question 53.If 15% of x is three times of 10% of y, then x:y =

Options:

1) 1:2

2) 2:1

3) 3:2

4) 2:3

Correct Answer: **2:1**

Question 54.A bookseller bought 500 text books for ₹ 20,000. He wanted to sell them at a profit so that he get 50 books free. At what profit percent should he sell them?

Options:

1) 10

2) 20

3) 15

4) 10.5

Correct Answer: **10**

Question 55.20% of a man's salary is paid as rent, 60% are his living expenses and 10% are his savings. If he spends remaining ₹ 30 on the education of his children, find his salary

Options:

1) 300

2) 900

3) 3000

4) 9000

Correct Answer: **300**

Question 56.A gun is fired at a distance of 6.64 km away from Ram. He hears the sound 20 seconds later. Then the speed of sound is

Options:

1) 664 m/s

2) 664 km/s

3) 332 m/s

4) 332 km/s

Correct Answer: **332 m/s**

Question 57.The simple interest on Rs. 2000 for 2 years at Rs. 75 per thousand per annum will be

Options:

1) Rs.150

2) Rs.300

3) Rs.600

4) Rs.400

Correct Answer: **Rs.300**

Question 58.If x = 1 + √2 + √3, then the value of x2 - 2x - 4 is

Options:

1) √6

2) 2√3

3) 3√2

4) 2√6

Correct Answer: **2√6**

Question 59.

If, $\frac{(a+b)}{\sqrt{ab}} = \frac{2}{1}$, then the value of (a - b) is

Options:

1) 1

2) 0

3) -1

4) 2

Correct Answer: **0**

Question 60.If ΔABC is an equilateral triangle of side 16 cm, then the length of altitude is

Options:

1) 2√3 cm

2) 4√3 cm

3) 8√3 cm

4) 5√3 cm

Correct Answer: **8√3 cm**

Question 61.O is the circumcentre of ΔABC. If AO = 8 cm, then the length of BO is

Options:

1) 12 cm

2) 3 cm

3) 6 cm

4) 8 cm

Correct Answer: **8 cm**

Question 62.Given that tan(θ + 15°) = √3. Then the value of θ is?

Options:

1) 15°

2) 75°

3) 45°

4) 65°

Correct Answer: **45°**

Question 63.The least number of square tiles of side 41 cms required to pave the ceiling of a room of size 15m 17cm long and 9m 2 cm broad is:

Options:

1) 902

2) 656

3) 738

4) 814

Correct Answer: **814**

Question 64.The average of fruits offered in a temple in a week was 75. The average of fruits offered in six days excluding Tuesday was 72. How many fruits were offered on Tuesday?

Options:

1) 90

2) 93

3) 72

4) 92

Correct Answer: **93**

Question 65.

If $a = x^{\frac{1}{3}}y^{\frac{1}{3}} + x^{\frac{-1}{3}}y^{\frac{-1}{3}}$, then $a^3 - 3ay - x$ is equal to

Options:

1) $\frac{y^2}{x}$

2) $\frac{x^2}{y}$

3) $\frac{a^2}{x}$

4) $\frac{a^2}{y}$

Correct Answer: 1

Question 66.

If $x+\frac{1}{x}=5$, then the value of $\frac{6x}{x^2+x+1}$ is,

Options:

1) 1

2) 2

3) 3

4) 4

Correct Answer: **1**

Question 67.If a > b > 0, AB = a - b cm, BC = 2√ab cm, then ∠ABC is

Options:

1) 45°

2) 60°

3) 90°

4) 120°

Correct Answer: 90°

Question 68.PR is a tangent to a circle with centre O and radius 4 cm at point Q. If ∠POR = 90°, OR = 5 cm and OP = 20/3 cm, then the length of PR is:

Options:

1) 3 cm

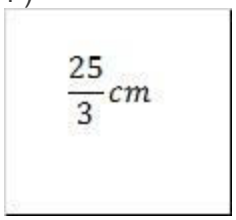
2)

$\frac{16}{3}cm$

3)

$\frac{23}{3}cm$

4)



Correct Answer: 4

Question 69.From a point, 40 m apart from the foot of a tower, the angle of elevation of its top is 60°. The height of the tower is

Options:

1) 40√3

2) 40√3 cm

3) 40√3 m

4) 40√2 m

Correct Answer: **40√3 m**

Question 70.The radius of a sphere and hemisphere are same. The ratio of their total surface area is

Options:

1) 3:1

2) 2:1

3) 3:2

4) 4:3

Correct Answer: **4:3**

Question 71.Two equal arcs of two circles subtend angle of 60° and 75° at the centre. The ratio of the radii of the two circles is

Options:

1) 5/4

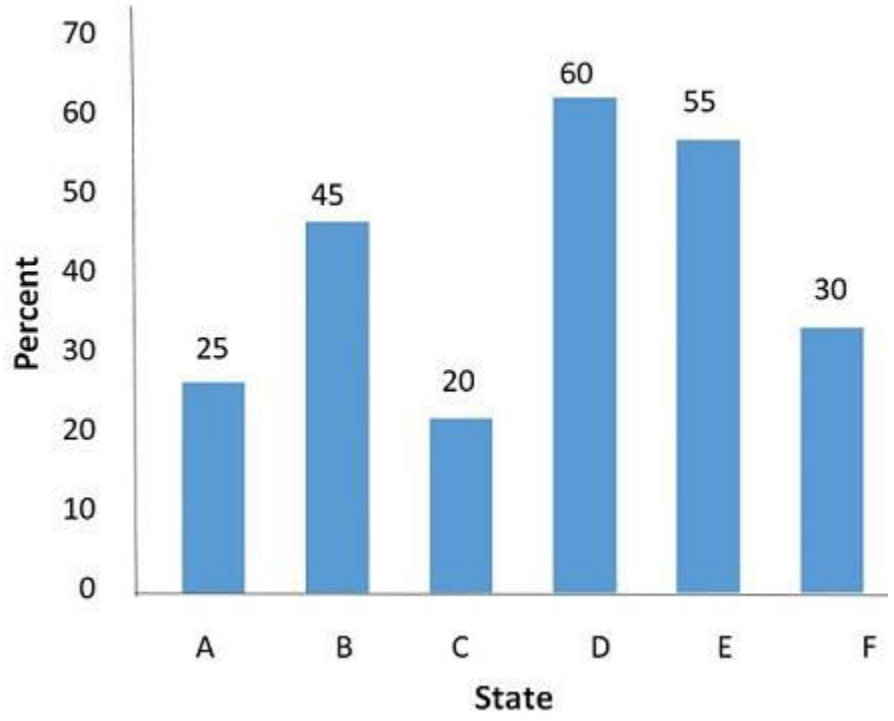
2) 3/2

3) 4/5

4) 2/3

Correct Answer: **5/4**

Direction: Study the following graph carefully and answer the questions



Question 72. Which state has the maximum percentage of electrified villages?

Options:

1) B

2) C

3) D

4) F

Correct Answer: C

Question 73. If the Central Government desires to give aid for speedy electrification starting from states with least electrification, which state will get fourth rank in order of priority?

Options:

1) F

2) C

3) E

4) B

Correct Answer: **F**

Question 74. How many States have at least 60% or more electrified villages?

Options:

1) Five

2) Three

3) Four

4) Two

Correct Answer: **Three**

Question 75. Which state has twice the percentage of villages electrified in comparison to state D?

Options:

1) A

2) E

3) F

4) C

Correct Answer: **C**