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

51.If the sum of a number and its reciprocal be 2, then the number is

Options:

1) 0

2) 1

3) -1

4) 2

Correct Answer: 1

52.The area of a rectangle in 60 cm2 and its perimeter is 34 cm, then the length of the diagonal is

Options:

1) 17cm

2) 11cm

3) 15cm

4) 13cm

Correct Answer: 13cm

53.A cloth merchant has announced 25% rebate in prices. If one needs to have a rebate of ₹ 40, then how many metres of cloth costing ₹ 32 per metre he should purchase.

Options:

1) 6m

2) 5m

3) 10m

4) 7m

Correct Answer: 5m

54. A profit of Rs. 960 is divided between A and B in the ratio 1/3:1/2. The difference of their profit is :

Options:

1) Rs.120

2) Rs.160

3) Rs.180

4) Rs.240

Correct Answer: Rs.240

55.The average monthly salary of 19 members of a group is Rs. 16000. If one more members whose monthly salary is Rs. 20000 has joined the group, then the average salary of the group is

Options:

1) Rs.18250

2) Rs.16200

3) Rs.18000

4) Rs.16250

Correct Answer: Rs.16200

56.A T.V was sold at a profit of 5% If it had been sold at a profit of 10% , the profit would have been Rs. 1000 more. What is its cost price ?

Options:

1) Rs.20000

2) Rs.5000

3) Rs.10000

4) Rs.15000

Correct Answer: Rs.20000

57.The price of an article is decreased by 10%. To restore it to its former value, the new price must be increased by :

Options:

1)

$9\dfrac{1}{11}\%$

2) 10%

3) 11%

4)

$11\dfrac{1}{9}\%$

Correct Answer: 4

58.A moving train passes a platform 50m long in 14 seconds and a lamp post in 10 seconds. The speed of the train (in km/h) is :

Options:

1) 24

2) 36

3) 40

4) 45

Correct Answer: 45

59.If $x^2 + 1/x^2 = 2$, then the value of $x - 1/x$ is

Options:

1) -2

2) 0

3) 1

4) -1

Correct Answer: 0

60. $If\ pq\ (p + q) = 1, Then\ the\ value\ of\ \dfrac{1}{p^3 q^3} - p^3 - q^3\ is\ equal\ to$

Options:

1) 1

2) 2

3) 3

4) 4

Correct Answer: 3

61.A chord of length 16 cm is drawn in a circle of radius 10 cm. The distance of the chord from the centre of the circle is

Options:

1) 8cm

2) 6cm

3) 4cm

4) 12cm

Correct Answer: 6cm

62.An angle in a semicircle is

Options:

1) 45°

2) 60°

3) 90°

4) 120°

Correct Answer: 90°

63.If x = a cosθ+ b sinθ and y = b cosθ- a sinθ, then x2 + y2 is equal to

Options:

1) ab

2) a2+b2

3) a2-b2

4) 1

Correct Answer: a2+b2

64.A can do a work in 12 days while B can do it in 15 days. They undertake to complete it together for Rs. 450. what will be the share of A in this amount of money ?

Options:

1) Rs.200

2) Rs.240

3) Rs.250

4) Rs.300

Correct Answer: Rs.250

65.If x = √2+1, then the value of x4-1/x4 is

Options:

1) 8√2

2) 18√2

3) 6√2

4) 24√2

Correct Answer: 24√2

66.If 9x² + 16y² = 60 and 3x + 4y = 6, then the value of xy is

Options:

1) -1

2) 1

3) -2

4) 2

Correct Answer: -1

67.If in ΔABC, DE ||BC, AB = 7.5cm, BD = 6cm and DE = 2cm, then the length of BC in cm is :

Options:

1) 6

2) 8

3) 10

4) 10.5

Correct Answer: 10

68. Suppose that the medians BD, CE and AF of a triangle ABC meet at G. Then AG: GF is

Options:

1) 1:2

2) 2:1

3) 1:3

4) 2:3

Correct Answer: 2:1

69.

If $\dfrac{cos\theta}{1-sin\theta} + \dfrac{cos\theta}{1+sin\theta} = 4$ then

the value of θ (0<θ<90°) is

Options:

1) 60°

2) 45°

3) 30°

4) 35°

Correct Answer: 60°

70.A sum of Rs. 2000 amounts to Rs. 4000 in two years at compound interest. In how many years does the same amount becomes Rs. 8000.

Options:

1) 2

2) 4

3) 6

4) 8

Correct Answer: 4

71.Two ships are sailing in the sea on the two sides of a light house. The angle of elevation of the top of the light house as observed from the two ships are 30° and 45° respectively. If the light house is 100m high, the distance between the two ships is :(take √3=1.73)
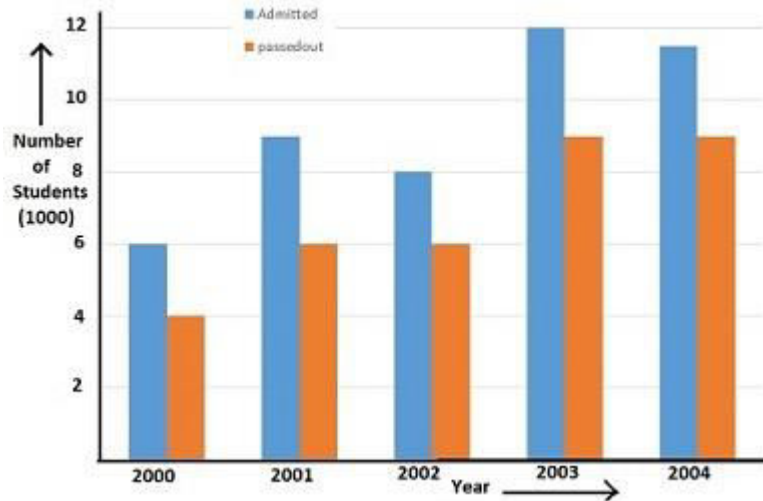
Options:

1) 173m

2) 200m

3) 273m

4) 300m

Correct Answer: 273m

The following figure shows the number of students (in thousands) admitted and passed out per year in a college during years 2000 to 2004. study the figure and answer the questions.

72. The percent increase in the number of students admitted in the year 2003 over that in 2001 is

Options:

1) 133.3

2) 33.3

3) 40.3

4) 66.7

Correct Answer: 33.3

73. During 2000 to 2003, the ratio of the total number fo the students passed out to the total number of students admitted is

Options:

1) 17/23

2) 17/6

3) 11/23

4) 5/7

Correct Answer: 5/7

74. In which of the two years, the pass percentage of students was between 60 to 70 ?

Options:

1) 2000 and 2001

2) 2003 and 2004

3) 2001 and 2002

4) none of these

Correct Answer: 2000 and 2001

75. The ratio of the number of students admitted in the year 2002 to the average of the number of students passed out in the years 2003 and 2004. is

Options:

1) 7:8

2) 8:9

3) 9:8

4) 8:7

Correct Answer: 8:9