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

51.A father can do job as fast as 2 sons working together. If one son does the job in 3 hours and the other in 6 hours, the number of hours taken by the father, to do the job alone is

Options:

1) 1

2) 2

3) 3

4) 4

Correct Answer: 2

52.The perimeter of a rhombus is 240 m and the distance between any two parallel sides is 20 m. The area of the rhombus in sq.m. is

Options:

1) 600

2) 1200

3) 2400

4) 4800

Correct Answer: 1200

53.A man sold an article for Rs. 450, after allowing a discount of 16 2/3 % on the printed price. What is that printed price?

Options:

1) Rs.525

2) Rs.530

3) Rs.535

4) Rs.540

Correct Answer: Rs.540

54.A sum of Rs. 770 has been divided among A, B, C in such a way that A receives 2/9th of what B and C together receive. Then A's share is

Options:

1) Rs.140

2) Rs.154

3) Rs.165

4) Rs.170

Correct Answer: Rs.140

55.A man bought 4 dozen eggs at Rs. 24 per dozen and 2 dozen eggs at Rs. 32 per dozen. To gain 20% on the whole, he should sell the eggs at

Options:

1) 16 per dozen

2) 21 per dozen

3) 32 per dozen

4) 35 per dozen

Correct Answer: 32 per dozen

56. P's salary is 25% higher than Q, what percentage is Q's salary lower than that of P?

Options:

1) 20

2) 29

3) 31

4) 331/3

Correct Answer: 20

57.A and B start running at the same time and from the same point around a circle. If A can complete one round in 40 seconds and B in50 seconds, how many seconds will they take to reach the starting point simultaneously?

Options:

1) 10

2) 200

3) 90

4) 2000

Correct Answer: 200

58. $If\ x-\frac{1}{3x}=\frac{1}{3}\ the\ value\ of\ 3x\ (x-\frac{1}{3x})$ is

Options:

1) -1

2) 1

3) -2

4) 2

Correct Answer: 1

59. $If\ P=3+\frac{1}{p},\ the\ value\ of\ p^4+\frac{1}{p^4}\ is$:

Options:

1) 81

2) 27

3) 120

4) 119

Correct Answer: 119

60.△ABC is an isosceles triangle with AB = AC = 15 cm and altitude from A on BC is 12 cm. Length of side BC is

Options:

1) 9 cm

2) 12 cm

3) 18 cm

4) 20 cm

Correct Answer: 18 cm

61.The mid points of AB and AC of a triangle ABC are respectively X & Y. If BC + XY = 12 units, then the value of BC - XY is:

Options:

1) 2 units

2) 6 units

3) 8 units

4) 4 units

Correct Answer: 4 units

62. Which of the following relations is correct for $0 < \theta < 90^\circ$

Options:

1) sinθ = sin2θ

2) sinθ < sin2θ

3) sinθ > sin2θ

4) sinθ = cosecθ

Correct Answer: sinθ > sin2θ

63.The difference between two numbers is 9 and the difference between their squares is 207. The numbers are

Options:

1) 17, 8

2) 16, 7

3) 15, 6

4) 23, 14

Correct Answer: 16, 7

64.The average of 20 numbers is calculated as 35. It is discovered later on that while calculating the average, one number, namely 85, was read as 45. The correct average is

Options:

1) 36

2) 36.5

3) 37

4) 37.5

Correct Answer: 37

65.If $x^2 - xy + y^2 = 2$ and $x^4 + x^2y^2 + y^4 = 6$, then the value of $x^2 + xy + y^2$ is:

Options:

1) 1

2) 12

3) 3

4) 36

Correct Answer: 3

66.If a2 + 13b2 + c2 - 4ab - 6bc = 0, then a:b:c is

Options:

1) 1:2:3

2) 2:3:1

3) 2:1:3

4) 1:3:2

Correct Answer: 2:1:3

67.The circum-centre of a triangle ABC is O. If ∠BAC = 85o, ∠BCA = 75o, then ∠OAC is of

Options:

1) 70°

2) 72°

3) 75°

4) 74°

Correct Answer: 70°

68.Radius of the incircle of an equilateral ΔABC of sides $2\sqrt{3}$ units is x cm. The value of x is

Options:

1) ⅓

2) ½

3) 1

4) √3

Correct Answer: 1

69. $If\ \tan 3\theta . \tan 7\theta = 1, then\ the\ value\ of\ \tan(\theta + 36°)\ is$

Options:

1) 1/√3

2) 0

3) 1

4) √3

Correct Answer: 1

70.If the angle of elevation of a cloud from a point 200 m above a lake is 30o and the angle of depression of its reflection in the lake is 60o. Then the height of the cloud above the lake is

Options:

1) 100 m

2) 200 m

3) 300 m

4) 400 m

Correct Answer: 400 m

71.The difference between the simple interest and compound interest (compounded annually) on Rs. 40,000 for 3 years at 8% per annum is

Options:

1) Rs.684.32

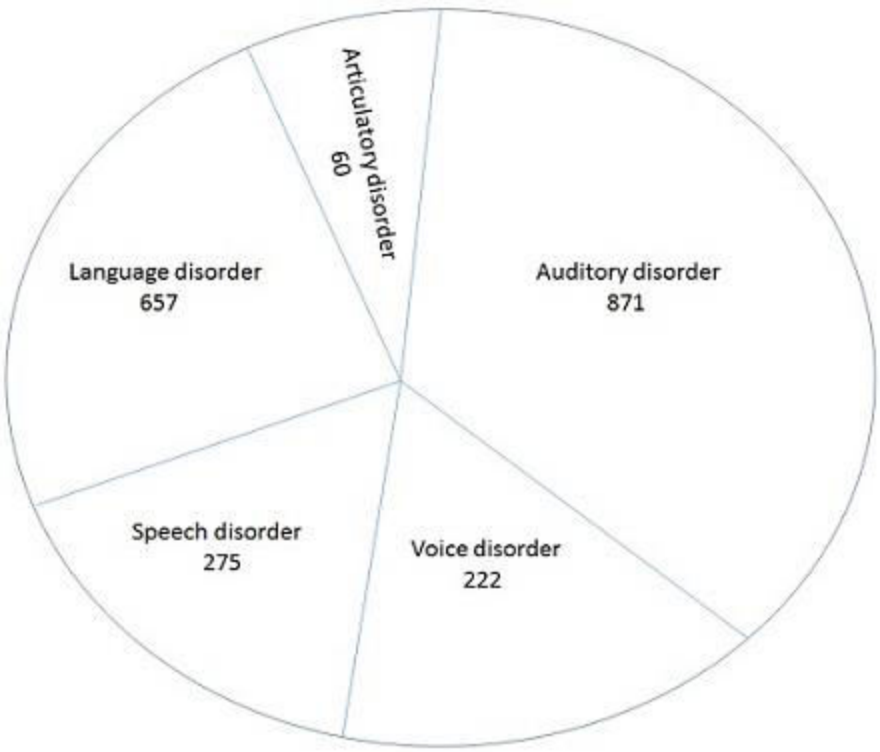
2) Rs.788.48

3) Rs.784.58

4) Rs.4000

Correct Answer: Rs.788.48

The pie-chart shows Distribution of Special Children Population during the year 1994-96. Study the pie-chart and answer the following questions.



72. Find the approximate percentage distribution of children with auditory disorder.

Options:

1) 43.7%

2) 42.7%

3) 41.7%

4) 40.7%

Correct Answer: 41.7%

73. What is the average number of cases in different types of special children during the year 1994-96.

Options:

1) 417

2) 413

3) 433

4) 465

Correct Answer: 417

74. Find the ratio between articulatory disorder and speech disorder cases.

Options:

1) 21:55

2) 55:21

3) 55:12

4) 12:55

Correct Answer: 12:55

75. What is the ratio between language disorder and the average of the remaining disorder cases.

Options:

1) 219:119

2) 119:219

3) 919:419

4) 729:529

Correct Answer: 219:119