

SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 30 August 2016" Afternoon Shift (Quantitative Aptitude)

EXAM DATE : 30-August-2016

EXAM START TIME : 13:15:00

EXAM NAME : SSC Examination 2016

Question 51. 36 men together can build a wall 140 m long in 21 days ; the number of men working at the same rate required to build the same wall in 14 days is

Options:

- 1) 54
- 2) 48
- 3) 36
- 4) 18

Correct Answer: 54

Question 52. The perimeters of a square and a rectangle are equal . If their area be 'A' m² and 'B' m² then correct statement is

Options:

- 1) $A < B$
- 2) $A \leq B$
- 3) $A > B$
- 4) $A \geq B$

Correct Answer: $A > B$

Question 53. A man bought a watch for 10% discount. If he had bought for 20% discount he would have got the watch for ₹ 125 less . The marked price of the watch is

Options:

- 1) rs. 2500
- 2) rs. 1250
- 3) rs. 3750
- 4) rs. 1000

Correct Answer: rs. 1250

Question 54. The compound ratio of the inverse ratios of the ratios $x : yz$, $y : zx$, $z : xy$ is :

Options:

1) 1 : xyz

2) xyz : 1

3) 1: 1

4) x : yz

Correct Answer: xyz : 1

Question 55.By selling a tape - recorder for ₹ 1040 a man gains 4% . If he sells it for ₹ 950 , his loss will be

Options:

1) 5%

2) 4%

3) 4.5%

4) 9%

Correct Answer: 5%

Question 56.What will be the percentage of increase in the area of a square when each of its sides is increased by 10% ?

Options:

1) 20

2) 11

3) 121

4) 21

Correct Answer: 21

Question 57.Every Sunday , Gin jogs 3 miles . For the rest of the week , each day he jogs 1 mile more than the previous day . How many miles Gin jogs in 2 weeks ?

Options:

1) 42

2) 63

3) 84

4) 98

Correct Answer: 84

Question 58.If $p^3 - q^3 = (p - q) \{ (p + q)^2 - x p q \}$ then the value of x is

Options:

1) 1

2) -1

3) 2

4) -2

Correct Answer: 1

Question 59.

On simplification the value of $1 - \frac{1}{1+\sqrt{2}} + \frac{1}{1-\sqrt{2}}$ is

Options:

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

Correct Answer: $1 - 2\sqrt{2}$

Question 60. A rectangle with one side of length 4 cm is inscribed in a circle of diameter 5 cm . Find area of the rectangle

Options:

- 1) 21 cm²
- 2) 12 cm²
- 3) 4 cm²
- 4) 3 cm²

Correct Answer: 12 cm²

Question 61. ABCD is a cyclic trapezium with AD || BC . If $\angle A = 105^\circ$, then other three angles are

Options:

- 1) $\angle B = 75^\circ$, $\angle C = 75^\circ$, $\angle D = 105^\circ$
- 2) $\angle B = 105^\circ$, $\angle C = 75^\circ$, $\angle D = 75^\circ$
- 3) $\angle B = 75^\circ$, $\angle C = 105^\circ$, $\angle D = 75^\circ$
- 4) $\angle B = 105^\circ$, $\angle C = 105^\circ$, $\angle D = 75^\circ$

Correct Answer: $\angle B = 75^\circ$, $\angle C = 75^\circ$, $\angle D = 105^\circ$

Question 62. If $\sec \theta = \operatorname{cosec} \theta$ ($0^\circ < \theta < 10^\circ$) then value of θ is

Options:

- 1) 9°
- 2) 5°
- 3) 8°
- 4) 3°

Correct Answer: 3°

Question 63.

If $x = (0.25)^{\frac{1}{3}}$, $y = (0.4)^2$, $z = (0.216)^{\frac{1}{3}}$, then

Options:

- 1) $Y > X > Z$
- 2) $x > y > z$
- 3) $Z > X > Y$
- 4) $X > Z > Y$

Correct Answer: $Z > X > Y$

Question 64. Average runs scored by 11 players of a cricket team is 23 runs . If the first player scored 113 runs . Find the average runs of the remaining players

Options:

- 1) 8 runs
- 2) 12 runs
- 3) 14 runs
- 4) 27 runs

Correct Answer: 14 runs

Question 65.

If $a^2 = by + cz$, $b^2 = cz + ax$, $c^2 = ax + by$, then the value of $\frac{x}{a+x} + \frac{y}{b+y} + \frac{z}{c+z}$ is

Options:

- 1) 1
- 2) $a + b + c$
- 3) $1/b + 1/b + 1/c$
- 4) 0

Correct Answer: 1

Question 66.

If $x^2 + y^2 = 29$ and $xy = 10$, where $x > 0, y > 0, x > y$ then the value of $\frac{x+y}{x-y}$ is

Options:

- 1) $-7/3$
- 2) $7/3$
- 3) $3/7$
- 4) $-3/7$

Correct Answer: $7/3$

Question 67. The ratio of circumradius and radius of an equilateral triangle is

Options:

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

Correct Answer: 2:1

Question 68. AB is a diameter of the circle with centre O , CD is chord of the circle , If $\angle BOC = 120^\circ$, then the value of $\angle ADC$ is

Options:

- 1) 42°
- 2) 30°
- 3) 60°
- 4) 35°

Correct Answer: 30°

Question 69. A straight tree breaks due to storm and the broken part bends so that the top of the tree touches the ground making an angle of 30° with the ground . The distance from the foot of the tree to the point , where the top touches the ground is 10 m. Find the total height of the tree?

Options:

- 1) $10\sqrt{3}$ m
- 2) $10\sqrt{3}/3$ m
- 3) $10(\sqrt{3} + 1)$ m
- 4) $10(\sqrt{3} - 1)$ m

Correct Answer: $10\sqrt{3}$ m

Question 70. The compound interest on a certain sum for 2 years at 10% per annum is Rs. 525 . The simple interest on the same sum for double the time at half the rate percent per annum is :

Options:

- 1) Rs.520
- 2) Rs.550
- 3) Rs. 500
- 4) Rs. 515

Correct Answer: Rs. 500

Question 71. If $\tan \theta = \tan 30^\circ + \tan 60^\circ$ and θ is an acute angle , then 2θ is equal to

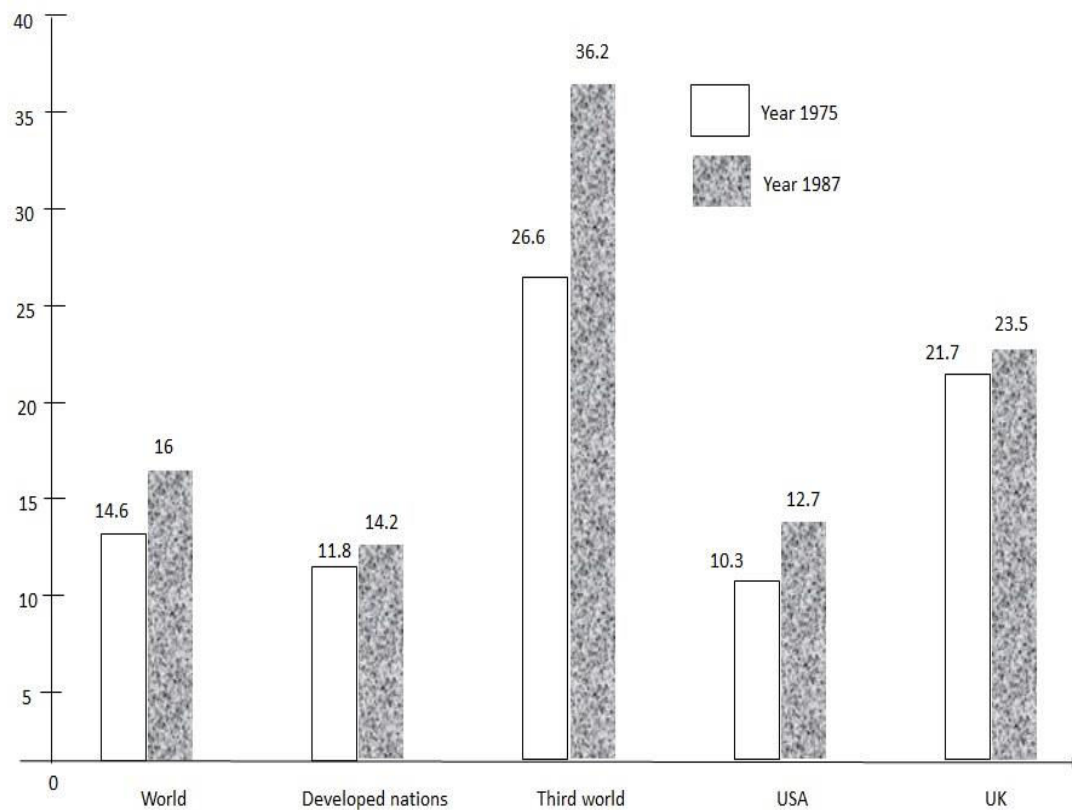
Options:

- 1) 30°
- 2) 45°
- 3) 90°
- 4) 0°

Correct Answer: 90°

(Question 72-75)

Question 72. Study the following Bar graph and answer the question . The Bar Graph gives the annual rates of inflation in percentages for 1975 and 1987.



From 1975 to 1987 , inflation rate increased in the third world countries approximately by

Options:

- 1) 10%
- 2) 20%
- 3) 30%
- 4) 36%

Correct Answer: 36%

Question 73. Study the following Bar graph and answer the question . The Bar Graph gives the annual rates of inflation in percentages for 1975 and 1987.

The change in rate of inflation was least in which of the following .

Options:

- 1) Developed Nations
- 2) UK
- 3) World
- 4) Third world

Correct Answer: World

Question 74. Study the following Bar graph and answer the question . The Bar Graph gives the annual rates of inflation in percentages for 1975 and 1987.

Comparing the figures for USA vis-a-vis the developed nations , it can be concluded that

Options:

- 1) USA had better control on inflation
- 2) Developed nations had better control on inflation
- 3) The inflation rate continues to be the same for USA and developed nations
- 4) No conclusions can be drawn

Correct Answer: USA had better control on inflation

Question 75. Study the following Bar graph and answer the question . The Bar Graph gives the annual rates of inflation in percentages for 1975 and 1987.

In the year 1987 , the inflation rate in the third world countries vis-a-vis the world jumped approximately by

Options:

- 1) 135%
- 2) 126%
- 3) 122%
- 4) 200%

Correct Answer: 126%