# SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 2 September 2016" Evening Shift (Quantitative Aptitude) 

EXAM DATE : 2-September-2016
EXAM START TIME : 16:15:00
EXAM NAME : SSC Examination 2016

Question 51.A and B together can do a piece of work in 12 days while $A$ alone can do the same work in 30 days. $B$ alone can do it in

Options:

1) 18 days
2) 20 days
3) 15 days
4) 22 days

## Correct Answer: 20 days

Question 52.
The diagonal of a cube is $\sqrt{192} \mathrm{~cm}$. Its volume (in $\mathrm{cm}^{3}$ ) will be
Options:

1) 216
2) 432
3) 512
4) 624

## Correct Answer: 512

Question 53.A watch is listed for Rs. 230 and is sold at a discount of $12 \%$, then the sale price of the watch is

Options:

1) Rs. 27.6
2) Rs. 276
3) Rs. 202.4
4) Rs. 257.6

Correct Answer: Rs.202.4
Question 54.Ravi has a roadmap with a scale of 1.5 cm for 18 km . He drives on that road for 72 km .
What would be his distance covered in that map.
Options:

1) 4 cm
2) 6 cm
3) 8 cm
4) 7 cm

Correct Answer: 6 cm
Question 55.The profit (in Rs.) after selling an article for Rs. 524 is the same as the loss (in Rs.) after selling it for Rs.452. The cost price of the article is:

Options:

1) Rs. 480
2) Rs. 485
3) Rs. 488
4) Rs. 500

Correct Answer: Rs. 488
Question 56.A circle and a square have same area. The ratio of the side of the square to the radius of the circle will be:

Options:
1)
$\sqrt{\pi}: 1$
2)

1: $\sqrt{\pi}$
3)
$\pi^{2}: 1$
4)
$1: \pi$

Correct Answer:
$\sqrt{\pi}: 1$
Question 57.How long does a train, 75 m long, moving at $60 \mathrm{~km} / \mathrm{hr}$ take to pass a certain telegraph post?
Options:

1) 3.5 seconds
2) 4.5 seconds
3) 5 seconds
4) 5.4 seconds

Correct Answer: 4.5 seconds

Question 58.
If $2 x-\frac{2}{x}=1(x \neq 0)$, then the value of $x^{3}-\frac{1}{x^{3}}$ is

Options:
1)
$\frac{13}{4}$
2)
$\frac{13}{8}$
3)
$\frac{17}{4}$
4)
$\frac{17}{8}$
Correct Answer:
$\frac{13}{8}$
Question 59 .
if $\left(a+\frac{1}{a}\right)^{2}=3$, then the value of $a^{2}+\frac{1}{a^{2}}$ will be
Options:

1) 0
2) 1
3) 2
4) 3

Correct Answer: 1
Question 60.The point equidistant from the vertices of a triangle is called its
Options:

1) incentre
2) circumcentre
3) orthocentre
4) centroid

Correct Answer: circumcentre
Question 61.If one angle of a triangle is equal to half the sum of the other two equal angles, then the triangle is

Options:

1) isosceles
2) scalene
3) equilateral
4) right angled

## Correct Answer: equilateral

Question 62.
If $\sin ^{2} \theta-\cos ^{2} \theta=\frac{1}{4}$, then the value of
$\sin ^{4} \theta-\cos ^{4} \theta$ is
Options:

1) $3 / 4$
2) $1 / 4$
3) $1 / 16$
4) $1 / 2$

Correct Answer: 1/4
Question 63.The least number, which when divided by 5, 6, 7 and 8 leaves a remainder 3 in each case, but when divided by 9 leaves no remainder, is:

Options:

1) 1677
2) 1683
3) 2523
4) 3363

Correct Answer: 1683
Question 64.A cricketer, whose bowling average was 12.4 runs/wicket takes 5 wickets for 22 runs in a match, thereby decreases his average by 0.4 . The number of wickets, taken by him before this match was:

Options:

1) 78
2) 87
3) 95
4) 105

Correct Answer: 95
Question 65.Sum of the factors of $4 b 2 c^{2}-\left(b^{2}+c^{2}-a^{2}\right) 2$ is

Options:

1) $a+b+c$
2) $2(a+b+c)$
3) 0
4) 1

Correct Answer: 2( $a+b+c$ )
Question 66.If $\{1 / 2(a-b)\}^{2}+a b=p(a+b)^{2}$, then the value of $p$ is
Options:

1) $p=4$
2) $\mathrm{P}=1 / 2$
3) $P=1 / 4$
4) $p=2$

Correct Answer: $\mathrm{P}=1 / 4$
Question 67.The sum of two angles of a triangle is $116^{\circ}$ and their difference is $\mathbf{2 4}^{\circ}$. The measure of smallest angle of the triangle is

Options:

1) $38^{\circ}$
2) $28^{\circ}$
3) $46^{\circ}$
4) $64^{\circ}$

Correct Answer: $46^{\circ}$
Question 68.In a $\triangle A B C, D E \| B C$. $D$ and $E$ lie on $A B$ and $A C$ respectively. If $A B=7 \mathrm{~cm}$ and $B D=3 \mathrm{~cm}$, then find BC:DE

Options:

1) $2: 2$
2) $3: 2$
3) $3.5: 2$
4) $7: 2$

Correct Answer: 3.5 : 2
Question 69.
The value of $\frac{\sin ^{2} 63^{\circ}+\operatorname{Sin}^{2} 27^{\circ}}{\operatorname{Cos}^{2} 17^{\circ}+\operatorname{Cos}^{2} 73^{\circ}}$ is

## Options:

1) 0
2) 1
3) 2
4) -1

## Correct Answer: 1

Question 70.The difference between the compound interest and the simple interest on Rs. 6250 at 8\% per annum in 2 years is

Options:

1) Rs. 30
2) Rs. 40
3) $R s .50$
4) Rs. 60

## Correct Answer: Rs. 40

Question 71.If the angle of elevation of the top of a pillar from the ground level is raised from 300 to 600 , the length of the shadow of a pillar of height $50 \sqrt{ } 3$ will be decreased by

Options:

1) 60 m
2) 75 m
3) 100 m
4) 50 m

Correct Answer: 100 m
Question 72.Study the following pie-chart and answer the questions.
Budget estimated by a family for their monthly expenses.
Total salary = ₹ 32000 per month


The budget estimated by the family on Clothing and Grocery together is

## Options:

1) Rs. 8950
2) Rs. 8960
3) Rs. 8850
4) Rs. 8860

Correct Answer: Rs. 8960
Question 73.Study the following pie-chart and answer the questions.
Budget estimated by a family for their monthly expenses.
Total salary = ₹ 32000 per month


Due to sudden marriage, the family incurs miscellaneous expenditure of Rs. 3040 in total. Then the increase in the amount under this head from that budgeted is

## Options:

1) Rs. 810
2) Rs. 1738
3) Rs .234
4) Rs. 800

Correct Answer: Rs. 800
Question 74.Study the following pie-chart and answer the questions.
Budget estimated by a family for their monthly expenses.
Total salary $=₹ 32000$ per month


The difference in the amount estimated by the family on Electricity and Call bill is:

## Options:

1) Rs. 4560
2) Rs. 4470
3) Rs. 4168
4) Rs. 4160

Correct Answer: Rs. 4160
Question 75.Study the following pie-chart and answer the questions.
Budget estimated by a family for their monthly expenses.
Total salary = ₹ 32000 per month


The family actually spent Rs. 4672 on Grocery. Then the difference in the amount budgeted and spent on grocery is:

Options:

1) Rs. 1528
2) Rs. 1728
3) Rs. 1278
4) Rs. 1628

Correct Answer: Rs. 1728

