

SSC CGL Tier-2 19-February-2018 Maths

Instructions

For the following questions answer them individually

Question 1

If $N = 1 + 11 + 111 + 1111 + \dots + 111111111$, then what is the sum of the digit's of N?

- A 45
- B 18
- C 36
- D 5

Answer: A

Question 2

What is the sum of first 40 terms of $1 + 3 + 4 + 5 + 7 + 7 + 10 + 9 + \dots$?

- A 1010
- B 1115
- C 1030
- D 1031

Answer: C

Question 3

What is the value of $\frac{1}{0.2} + \frac{1}{0.02} + \frac{1}{0.002} + \dots$ upto 9 terms?

- A 222222222
- B 111111111
- C 555555555
- D 525252525

Answer: C

Question 4

What is the value of $\frac{3.6 \times 1.62 + 0.48 \times 3.6}{1.8 \times 0.8 + 10.8 \times 0.3} - 2.16$?

- A 2.4
- B 2
- C 4
- D 3

Answer: D

Question 5

If $1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{1 + x}}} = \frac{5}{8}$, then what is the value of x ?

- A 2
- B 3
- C 1
- D 4

Answer: A

Question 6

If $(1 + \frac{1}{2})(1 + \frac{1}{4})(1 + \frac{1}{6})(1 + \frac{1}{8})(1 - \frac{1}{3})(1 - \frac{1}{5})(1 - \frac{1}{7}) = 1 + \frac{1}{x}$, then what is the value of x ?

- A 6
- B 8
- C 5
- D 7

Answer: B

Question 7

What is the value of $\frac{1}{3 \times 7} + \frac{1}{7 \times 11} + \frac{1}{11 \times 15} + \dots + \frac{1}{899 \times 903}$?

- A $\frac{21}{509}$
- B $\frac{18}{403}$
- C $\frac{25}{301}$
- D $\frac{29}{31}$

Answer: C

Question 8

What is the unit digit of $1^5 + 2^5 + 3^5 + \dots + 20^5$?

- A 0
- B 5
- C 2
- D 4

Answer: A

Question 9

x, y and z are prime numbers and $x + y + z = 38$. What is the maximum value of x ?

- A 19
- B 23
- C 31
- D 29

Answer: C

Question 10

N is the smallest three digit prime number. When N is divided by 13, then what will be the remainder?

- A 8
- B 9
- C 7
- D 10

Answer: D

Question 11

How many natural numbers are there between $\sqrt{261}$ and $\sqrt{45109}$?

- A 144
- B 196
- C 168
- D 195

Answer: B

Question 12

What is the value of $\sqrt{121} + \sqrt{12321} + \sqrt{1234321} + \sqrt{123454321}$?

- A 12345
- B 123456
- C 12344
- D 123454

Answer: C

Question 13

$p^3 + q^3 + r^3 - 3pqr = 4$. If $a = q + r$, $b = r + p$ and $c = p + q$, then what is the value of $a^3 + b^3 + c^3 - 3abc$?

- A 4
- B 8
- C 2
- D 12

Answer: B

Question 14

If α and β are the roots of the equation $x^2 + x - 1 = 0$, then what is the equation whose roots are α^5 and β^5 ?

- A $x^2 + 7x - 1 = 0$
- B $x^2 - 7x - 1 = 0$
- C $x^2 - 11x - 1 = 0$
- D $x^2 + 11x - 1 = 0$

Answer: D

Question 15

If x and y are natural numbers such that $x + y = 2017$, then what is the value of $(-1)^x + (-1)^y$?

- A 2
- B -2
- C 0
- D 1

Answer: C

Question 16

If $x + \left(\frac{1}{x}\right) = \frac{(\sqrt{3}+1)}{2}$, then what is the value of $x^4 + \left(\frac{1}{x^4}\right)$?

- A $\frac{(4\sqrt{3}-1)}{4}$
- B $\frac{(4\sqrt{3}+1)}{2}$
- C $\frac{(-4\sqrt{3}-1)}{4}$
- D $\frac{(-4\sqrt{3}-1)}{2}$

Answer: C

Question 17

If $a + a^2 + a^3 - 1 = 0$, then what is the value of $a^3 + \left(\frac{1}{a}\right)$?

- A 1
- B 4
- C 2
- D 3

Answer: C

Question 18

If $a - \left(\frac{1}{a}\right) = b$, $b - \left(\frac{1}{b}\right) = c$ and $c - \left(\frac{1}{c}\right) = a$, then what is the value of $\left(\frac{1}{ab}\right) + \left(\frac{1}{bc}\right) + \left(\frac{1}{ca}\right)$?

- A -3
- B -6
- C -1
- D -9

Answer: A

Question 19

If the roots of the equation $a(b - c)x^2 + b(c - a)x + c(a - b) = 0$ are equal, then which of the following is true?

- A $b = \frac{(a+c)}{ac}$
- B $\frac{2}{b} = \left(\frac{1}{a}\right) + \left(\frac{1}{c}\right)$
- C $2b = \left(\frac{1}{a}\right) + \left(\frac{1}{c}\right)$
- D $abc = ab + bc + ca$

Answer: B

Question 20

If $[\sqrt{(a^2 + b^2 + ab)}] + [\sqrt{(a^2 + b^2 - ab)}] = 1$, then what is the value of $(1 - a^2)(1 - b^2)$?

- A $\frac{1}{4}$
- B $\frac{4}{7}$
- C $\frac{5}{4}$
- D $\frac{3}{4}$

Answer: D

Question 21

If $3x + 4y - 11 = 18$ and $8x - 6y + 12 = 6$, then what is the value of $5x - 3y - 9$?

- A 18
- B -9
- C -27
- D -18

Answer: B

Question 22

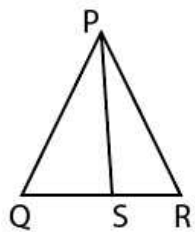
If $a + b + c = \frac{7}{12}$, $3a - 4b + 5c = \frac{3}{4}$ and $7a - 11b - 13c = \frac{-7}{12}$, then what is the value of $a + c$?

- A $\frac{1}{2}$
- B $\frac{5}{12}$
- C $\frac{3}{4}$
- D $\frac{1}{4}$

Answer: B

Question 23

In the given figure, $PQ = PS = SR$ and $\angle QPS = 40^\circ$, then what is the value of $\angle QPR$ (in degrees)?



- A 45
- B 60
- C 75
- D 50

Answer: C

Question 24

In triangle PQR, C is the centroid. $PQ = 30$ cm, $QR = 36$ cm and $PR = 50$ cm. If D is the midpoint of QR, then what is the length (in cm) of CD?

- A $\frac{(4\sqrt{86})}{3}$

B $\frac{(2\sqrt{86})}{3}$

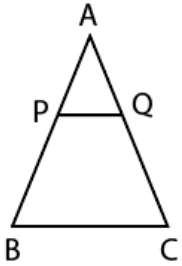
C $\frac{(5\sqrt{86})}{3}$

D $\frac{(5\sqrt{86})}{2}$

Answer: A

Question 25

In the given figure, $AQ = 4\sqrt{2}$ cm, $QC = 6\sqrt{2}$ cm and $AB = 20$ cm. If PQ is parallel to BC . then what is the value (in cm) of PB



A 8

B 12

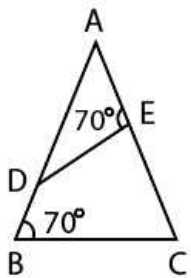
C 6

D 15

Answer: B

Question 26

In the given figure, if $AD = 12$ cm, $AE = 8$ cm and $EC = 14$ cm, then what is the value (in cm) of BD ?



A $\frac{50}{3}$

B 15

C $\frac{8}{3}$

D $\frac{44}{3}$

Answer: C

Question 27

Two circles are having radii 9 cm and 12 cm. The distance between their centres is 15 cm. What is the length (in cm) of their common chord?

- A 6.8
- B 13.6
- C 7.2
- D 14.4

Answer: D

Question 28

Two circles touch each other at point X. Two common tangents of the circles meet at point P and none of the tangents passes through X. These tangents touch the larger circle at points B and C. If the radius of the larger circle is 15 cm and $CP = 20$ cm, then what is the radius (in cm) of the smaller circle?

- A 3.5
- B 3.75
- C 4.25
- D 4.45

Answer: B

Question 29

Two circles touch each other at point X. A common tangent touch them at two distinct points Y and Z. If another tangent passing through X cut YZ at A and $XA = 16$ cm, then what is the value (in cm) of YZ?

- A 18
- B 24
- C 16
- D 32

Answer: D

Question 30

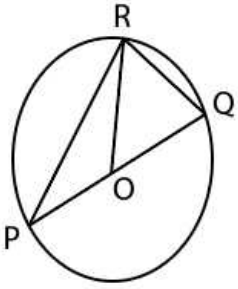
There are 8 equidistant points A, B, C, D, E, F, G and H (in same order) on a circle. What is the value of $\angle FDH$ (in degrees)?

- A 22.5
- B 45
- C 30
- D 42.5

Answer: B

Question 31

In the given figure, O is the centre of the circle and $\angle QOR = 50^\circ$, then what is the value of $\angle RPQ$ (in degrees)?

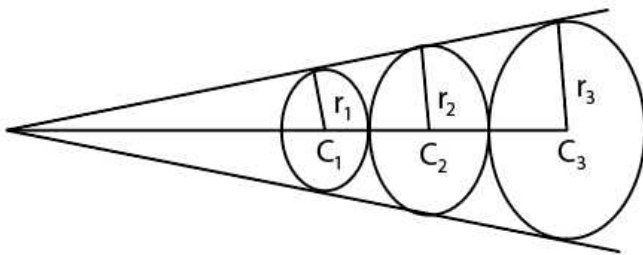


- A 15
- B 25
- C 20
- D 30

Answer: B

Question 32

Three circles C_1 , C_2 and C_3 with radii r_1 , r_2 and r_3 (where $r_1 < r_2 < r_3$) are placed as shown in the given figure. What is the value of r_2 ?



- A $\sqrt{(r_1 r_3)}$
- B $\frac{(r_1 + r_3)}{2}$
- C $\frac{(2r_1 r_2)}{(r_1 + r_2)}$
- D $\sqrt{(r_1 + r_3)}$

Answer: A

Question 33

An equilateral triangle of area 300 cm^2 is cut from its three vertices to form a regular hexagon. Area of hexagon is what percent of the area of triangle?

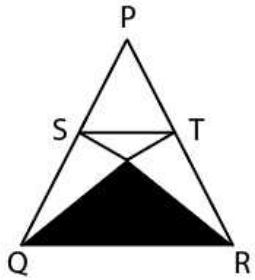
- A 66.66%
- B 33.33%
- C 83.33%

D 56.41%

Answer: A

Question 34

In the given figure, PQR is an equilateral triangle with side as 12 cm . S and T are the mid points of the sides PQ and PR respectively. What is the area (in cm^2) of the shaded region?



A $10\sqrt{3}$

B $12\sqrt{3}$

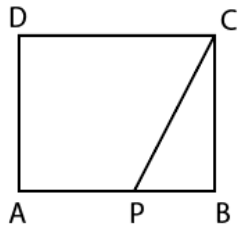
C $9\sqrt{3}$

D $14\sqrt{3}$

Answer: B

Question 35

$ABCD$ is a rectangle. P is a point on the side AB as shown in the given figure. If $DP = 13$, $CP = 10$ and $BP = 6$, then what is the value of AP ?



A $\sqrt{105}$

B $\sqrt{133}$

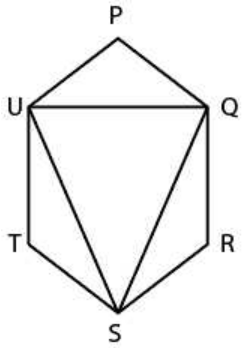
C 12

D 10

Answer: A

Question 36

In the given figure, $PQRSTU$ is a regular hexagon of side 12 cm. what is the area (in cm^2) of triangle SQU ?

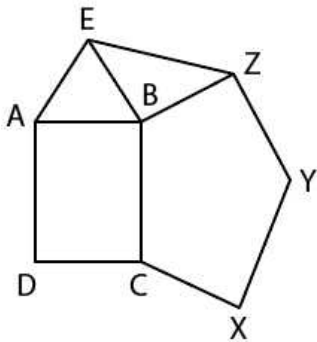


- A $162\sqrt{3}$
- B $216\sqrt{3}$
- C $108\sqrt{3}$
- D $54\sqrt{3}$

Answer: C

Question 37

In the given figure. $ABCD$ is a square, $BCXYZ$ is a regular pentagon and ABE is an equilateral triangle. What is the value (in degrees) of $\angle EBZ$?

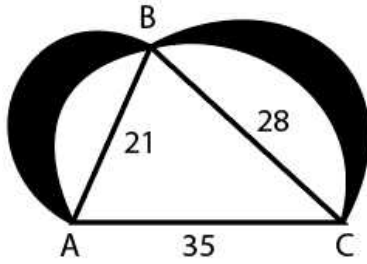


- A 102
- B 98
- C 78
- D 64

Answer: A

Question 38

In the given figure, 3 semicircles are drawn on three sides of triangle ABC. AB = 21 cm, BC = 28 cm and AC = 35 cm. What is the area (in cm^2) of the shaded part?



- A 588
- B 324
- C 294
- D 286

Answer: C

Question 39

The sum of radii of the two circles is 91 cm and the difference between their area is 2002 cm^2 . What is the radius (in cm) of the large circle?

- A 56
- B 42
- C 63
- D 49

Answer: D

Question 40

A right triangular prism has equilateral triangle as its base. Side of the triangle is 15 cm. Height of the prism is $20\sqrt{3}$ cm. What is the volume (in cm^3) of the prism?

- A 1125
- B 6750
- C 4500
- D 3375

Answer: D

Question 41

The height of a cone is 45 cm. It is cut at a height of 15 cm from its base by a plane parallel to its base. If the volume of the smaller cone is 18480 cm^3 , then what is the volume (in cm^3) of the original cone?

- A 34650

B 61600

C 36960

D 62370

Answer: D

Question 42

The ratio of the curved surface area and total surface area of a right circular cylinder is 2 : 5. If the total surface area is 3080 cm^2 , then what is the volume (in cm^3) of the cylinder?

A $4312\sqrt{6}$

B $3822\sqrt{6}$

C $4522\sqrt{6}$

D $4642\sqrt{6}$

Answer: A

Question 43

The radius and height of a solid cylinder are increased by 2% each. What will be the approximate percentage increase in volume? 6.76

A 6.76

B 5.88

C 6.12

D 3.34

Answer: C

Question 44

A sphere of radius 21 cm is cut into 8 identical parts by 3 cuts (1 cut along each axis). What will be the total surface area (in cm^2) of each part?

A 844.5

B 1732.5

C 1039.5

D 1115.6

Answer: B

Question 45

Two identical hemispheres of maximum possible size are cut from a solid cube of side 14 cm. The bases of the hemispheres are part of the two opposite faces of cube. What is the total volume (in cm^3) of the remaining part of the cube?

A 1556.33

- B 898.5
- C 1467.33
- D 1306.67

Answer: D

Question 46

Identical cubes of largest possible size are cut from a solid cuboid of size $65\text{cm} \times 26\text{cm} \times 3.9\text{cm}$. What is the total surface area (in cm^2) of all the small cubes taken together?

- A 30420
- B 15210
- C 20280
- D 16440

Answer: A

Question 47

A regular triangular pyramid is cut by 2 planes which are parallel to its base. The planes trisect the altitude of the pyramid. Volume of top, middle and bottom part is V_1 , V_2 and V_3 respectively. What is the value of $V_1 : V_2 : V_3$?

- A 1 : 8 : 27
- B 1 : 8 : 19
- C 2 : 9 : 27
- D 1 : 7 : 19

Answer: D

Question 48

What is the value of $[(\cos 7A + \cos 5A) \div (\sin 7A - \sin 5A)]$?

- A $\tan A$
- B $\tan 4A$
- C $\cot 4A$
- D $\cot A$

Answer: D

Question 49

What is the value of $\frac{[1 - \sin(90 - 2A)]}{[1 + \sin(90 + 2A)]}$?

- A $\sin A \cos A$

- B $\cot^2 A$
- C $\tan^2 A$
- D $\sin^2 A \cos A$

Answer: C

Question 50

What is the value of $\sin 75^\circ + \sin 15^\circ$?

- A $\sqrt{3}$
- B $2\sqrt{3}$
- C $\sqrt{\left(\frac{3}{2}\right)}$
- D $\frac{3}{\sqrt{2}}$

Answer: C

Question 51

What is the value of $[(\cos 3\theta + 2 \cos 5\theta + \cos 7\theta) \div (\cos \theta + 2 \cos 3\theta + \cos 5\theta)] + \sin 2\theta \tan 3\theta$?

- A $\cos 2\theta$
- B $\sin 2\theta$
- C $\tan 2\theta$
- D $\cot \theta \sin 2\theta$

Answer: A

Question 52

What is the value of $\frac{[2 \sin(45+\theta) \sin(45-\theta)]}{\cos 2\theta}$?

- A 0
- B $\tan 2\theta$
- C $\cot 2\theta$
- D 1

Answer: D

Question 53

What is the value of $\sin (90^\circ + 2A)[4 - \cos^2 (90^\circ - 2A)]$?

- A $2(\cos^3 A - \sin^3 A)$
- B $2(\cos^3 A + \sin^3 A)$
- C $4(\cos^6 A + \sin^6 A)$
- D $4(\cos^6 A - \sin^6 A)$

Answer: D

Question 54

What is the value of $[\cos(90 + A) \div \sec(270 - A)] + [\sin(270 + A) \div \operatorname{cosec}(630 - A)]$?

- A $3 \sec A$
- B $\tan A \sec A$
- C 0
- D 1

Answer: D

Question 55

On walking 100 metres towards a building in a horizontal line, the angle of elevation of its top changes from 45° to 60° . What will be the height (in metres) of the building?

- A $50(3 + \sqrt{3})$
- B $100(\sqrt{3} + 1)$
- C 150
- D $100\sqrt{3}$

Answer: A

Question 56

The upper part of a tree broken over by the wind make an angle of 60° with the ground. The distance between the root and the point where top of the tree touches the ground is 25 metres. What was the height (in metres) of the tree?

- A 84.14
- B 93.3
- C 98.25
- D 120.24

Answer: B

Question 57

The height of a tower is 300 meters. When its top is seen from top of another tower, then the angle of depression is 60° . The horizontal distance between the bases of the two towers is 120 metres. What is the height (in metres) of the small tower?

- A 88.24
- B 106.71
- C 92.15
- D 112.64

Answer: C

Instructions

The given table shows the number (in percent) of employees working in different departments of an organization. The table also shows the ratio of males and females and the ratio of employees living in city Z and employees living in city Y. The total number of employees in the organization are 80000.

Department	Number of employees	Gender	City
		M : F	Z : Y
A	10%	7:03	1:09
B	22%	13:09	3:19
C	12%	1:02	5:01
D	20%	3:02	1:03
E	36%	8:01	5:13

Question 58

How many employees of department A and C together are living in city Z?

- A 9000
- B 9200
- C 8800
- D 8200

Answer: C

Question 59

Male employees of department E is what percent of the employees living in city Z from department A?

- A 1600
- B 2400
- C 3200
- D 4200

Answer: C

Question 60

What is the ratio of male employee working in department B and D together to female employee working in department A and E together?

- A 13 : 8

B 25 : 7

C 23 : 9

D 7 : 9

Answer: B

Question 61

On an average how many residents of city Y are working in each department?

A 11360

B 12420

C 9130

D 10940

Answer: A

Question 62

What are the total number of employee in department A and E together?

A 29400

B 17600

C 46400

D 36800

Answer: D

Instructions

For the following questions answer them individually

Question 63

If a dairy mixes cow's milk which contains 10% fat with buffalo's milk which contains 20% fat, then the resulting mixture has fat $\left(\frac{120}{7}\right)$ % of fat. What ratio was the cow's milk mixed with buffalo's milk?

A 2 : 5

B 1 : 5

C 2 : 3

D 2 : 1

Answer: A

Question 64

In what ratio should tea costing Rs 300/kg be mixed with tea costing Rs 200/kg so that the cost of the mixture is Rs 225/kg?

A 3 : 1

B 1 : 3

C 1 : 4

D 4 : 1

Answer: B

Question 65

A and B started a partnership business investing some amount in the ratio of 5 : 6. C joined then after 6 months with an amount equal to $\frac{2}{3}$ of B. What was their profit (in Rs) at the end of the year if C got Rs 21,600 as his share?

A 46800

B 56160

C 70200

D 1,40,400

Answer: D

Question 66

A and B invest in a business in the ratio 2 : 5. If 50% of the total profit goes to charity and A's share is Rs 3.6 lakhs, the total profit is Rs _____ lakhs.

A 12.6

B 25.2

C 37.8

D 16.8

Answer: B

Question 67

A is thrice as productive as C. Together they can complete a job in 22.5 days. If B joins them after they have worked for 15 days then in how many days can they finish the rest of the job if B alone can do the job in 15 days?

A 6

B 3

C 9

D 2

Answer: B

Question 68

If A, B and C can do a job working alone in 12, 18 and 36 days respectively. They all work together for 2 day, then B quits. How many days will A and C take to finish rest of the job?

A 9

B 6

C 3

D 4

Answer: B

Question 69

If A, B and C together do a job in 4 days, A and C together do the job in 4.5 days and B and C together do the job in 12 days then in how many days can C alone do the job?

A 36

B 6

C 18

D 12

Answer: C

Question 70

If A alone can do a job in 40 days then, in how many days can B alone do the job if together they can do the job in 8 days?

A 15

B 10

C 20

D 25

Answer: B

Question 71

1 bottle of honey costs Rs 240 but a pack of 4 of the same bottles costs Rs 768. What is the effective discount (in %) on the pack?

A 16

B 25

C 10

D 20

Answer: D

Question 72

If the cost price of an article is Rs x . It is marked up by 100%. It is sold at Rs 1,200 after giving 20% discount. What is value of x ?

A 750

- B 1500
- C 1000
- D 2000

Answer: A

Question 73

A Rs 1000 box of cookies is offered at 10% discount and a Rs 400 bar of chocolate at 8% discount. If we buy 2 boxes of cookies and 3 bars of chocolate, what is the effective discount we get (in %)?

- A 9
- B 9.25
- C 8.75
- D 8.5

Answer: B

Question 74

The price of a product after getting 20% discount is Rs 3,024 which includes 5% tax on selling price. What was the marked price (in Rs) of the product?

- A 3780
- B 2742
- C 3600
- D 2880

Answer: C

Question 75

The price of a movie ticket was increased in the ratio 9 : 10. What is the increase in the revenue (in Rs.) of the cinema hall, if the original fare was Rs 180 and 2200 tickets were sold.

- A 44000
- B 440000
- C 39600
- D 396000

Answer: A

Question 76

If $2A = 3B = 8C$; What is $A : B : C$?

- A 8 : 3 : 2

B 8 : 4 : 3

C 2 : 3 : 8

D 12 : 8 : 3

Answer: D

Question 77

What is the Number of candidates who had applied if the ratio of selected to unselected was 14 : 25. If 35 less had applied and 10 less selected, the ratio of selected to unselected would have been 3 : 5?

A 195

B 205

C 185

D 175

Answer: A

Question 78

What is the fourth proportional to 6, 24 and 83?

A 249

B 332

C 166

D 498

Answer: B

Question 79

Rs 10,200 has to be divided between A,B & C so that A gets $\frac{2}{3}$ of what B gets and B gets $\frac{1}{4}$ of what C gets. How much more does C get over A (in Rs)?

A 6000

B 7200

C 1800

D 1200

Answer: A

Question 80

Before a battle there were the ratio of captains to soldiers was 2 : 7. During the war 25 captains and 100 soldiers were martyred. The new ratio of captains to soldiers became 3 : 10. What is the number of soldiers after the war?

- A 250
- B 200
- C 150
- D 100

Answer: A

Question 81

The average marks of 18 students in an examination was 60. It was later found that the marks of one student had been wrongly entered as 63 instead of 36. The correct average is:

- A 59
- B 59.5
- C 58
- D 58.5

Answer: D

Question 82

In a class of 60 students there are 20 girls who scored an average of 40 marks in the test, what is the average marks of the boys if the class average is 60 marks?

- A 60
- B 70
- C 50
- D 80

Answer: B

Question 83

The average of 44 consecutive odd numbers is 144. What is the largest number?

- A 189
- B 191
- C 187
- D 193

Answer: C

Question 84

A batsman makes 100 runs in the 25th match of his career. His average runs per match increases by 1.4. Find his average before the 25th match.

- A 65
- B 55
- C 75
- D 45

Answer: A

Question 85

An oil refinery buys oil at Rs 3600 per barrel. There is 10% wastage. If the refinery wants to earn 5% profit then at what price should it sell including 8% tax on selling price? (in Rs per barrel)

- A 3674
- B 3711
- C 4219
- D 4536

Answer: D

Question 86

A vendor sells a coconut at Rs 24 and suffers 24% loss. If he wants to make 14% profit, then at what price (in Rs) should he sell?

- A 32
- B 30
- C 36
- D 28

Answer: C

Question 87

A villager buys a goat and a sheep together for Rs 14,250. He sold the sheep at a profit of 10% and the goat at a loss of 20%. If he sold both the animals at the same price, then what was the cost price of the cheaper animal?

- A 8250
- B 6600
- C 7500
- D 6000

Answer: D

Question 88

On a certain item profit is 120%. If the cost price increases by 10% then what will be the new profit margin (in %) if selling price remains the same?

- A 50
- B 60
- C 100
- D 90

Answer: C

Question 89

If 35% are the passing marks. A student gets 200 marks yet fails by 24 marks. What is the maximum marks?

- A 820
- B 550
- C 640
- D 680

Answer: C

Question 90

A student gets 22 marks more in French than what she got in German. Her German marks are 28% of the sum of her French and German marks. What are her French marks?

- A 14
- B 36
- C 18
- D 42

Answer: B

Question 91

2% of a = b, then b% of 10 is the same as:

- A 200% of a
- B 20% of a/100
- C 20% of a/10
- D 200% of a/10

Answer: B

Question 92

A man's annual income has increased by Rs 1.2 lakhs but the tax on income that he has to pay has reduced from 12% to 10%. He now pays the same amount of tax as before. What is his increased income (in Rs lakhs)?

- A 8.4
- B 7.2
- C 9.6
- D 6

Answer: B

Question 93

A car travelling at an average speed of 72 km/hr takes 9 minutes to travel a certain distance. By how much should it increase its speed (in km/hr) to travel the same distance in 8 minutes?

- A 8
- B 9
- C 7
- D 6

Answer: B

Question 94

Train A takes 1 hour more than train B to travel a distance of 720 km. Due to engine trouble speed of train B falls by a third, so it takes 3 hours more than Train A to complete the same journey? What is the speed of Train A (in km/hr)?

- A 80
- B 90
- C 60
- D 70

Answer: A

Question 95

Two cars A and B travel from one city to another city, at speeds of 60 km/hr and 108 km/hr respectively. If car B takes 2 hours lesser time than car A for the journey, then what is the distance (in km) between the two cities?

- A 240
- B 270
- C 300
- D 330

Answer: B

Question 96

B starts 4.5 minutes after A from the same point, for a place at a distance of 3.5 miles from the starting point. A on reaching the destination turns back and walk a mile where he meets B. If A's speed is a mile in 6 minutes then B's speed is a mile in ___ minutes?

- A 8
- B 10
- C 12
- D 9

Answer: D

Question 97

If compound interest received on a certain amount in the 3rd year is Rs. 12,100, what will be the compound interest (in Rs) for the 4th year on the same amount if rate of interest is 9%?

- A 17080
- B 15669
- C 13189
- D 14376

Answer: C

Question 98

The amount received at 10% per annum compound interest after 3 yrs is Rs 10,648. What was the principal (in Rs)?

- A 8000
- B 9000
- C 8500
- D 7500

Answer: A

Question 99

In how many years will Rs 25,000 yield Rs 8,275 as compound interest at 10% per annum compounded annually?

- A 2
- B 4
- C 3
- D 5

Answer: C

Question 100

What is the rate of interest if simple interest earned on a certain sum for the 3rd year is Rs 1,750 and compound interest earned for 2 years is Rs 3622.5?

- A 8

B 9

C 10

D 7

Answer: D