

• Question No. 1

What is the unit digit of the sum of first 111 whole numbers?

Options :

- 1. 4
- 2. 6
- 3. 5
- 4. 0
- 5.

Answer : 5

• Question No. 2

How many 100 digit positive numbers are there?

Options :

- 1. 9×10^{99}
- 2. 9×10^{100}
- 3. 10100
- 4. 11×10^{98}
- 5.

Answer : 9×10^{99}

• Question No. 3

What is the value of $\frac{5.6 \times 0.36 + 0.42 \times 3.2}{0.8 \times 2.1}$?

Options :

- 1. 2
- 2. 1
- 3. 3
- 4. $3/2$
- 5.

Answer : 2

- Question No. 4

What is the value of

$$\frac{(1.2)^3 + (0.8)^3 + (0.7)^3 - 2.016}{(1.35)[(1.2)^2 + (0.8)^2 + (0.7)^2 - 0.96 - 0.84 - 0.56]}?$$

Options :

- 1. $1/4$
- 2. $1/2$
- 3. 1
- 4. 2
- 5.

Answer : 2

- Question No. 5

What is the unit digit of $(217)^{413} \times (819)^{547} \times (414)^{624} \times (342)^{812}$?

Options :

- 1. 2
- 2. 4
- 3. 6
- 4. 8
- 5.

Answer : 8

- Question No. 6

What is the value of $S = \frac{1}{1 \times 3 \times 5} + \frac{1}{1 \times 4} + \frac{1}{3 \times 5 \times 7} + \frac{1}{4 \times 7} + \frac{1}{5 \times 7 \times 9} + \frac{1}{7 \times 10} + \dots$ upto 20 terms, then what is the value of S?

Options :

1. 6179/15275
2. 6070/14973
3. 7191/15174
4. 5183/16423
- 5.

Answer : 6070/14973

- Question No. 7

Which of the following is **TRUE**?

- I. $\frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt{5}}$
- II. $\frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt{5}}$
- III. $\frac{1}{\sqrt{5}} > \frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt[4]{29}}$
- IV. $\frac{1}{\sqrt{5}} > \frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt[3]{12}}$

Options :

1. Only I
2. Only II
3. Only III
4. Only IV
- 5.

Answer : Only III

• Question No. 8

N is the largest two digit number, which when divided by 3, 4 and 6 leaves the remainder 1, 2 and 4 respectively.
What is the remainder when N is divided by 5?

Options :

1. 4
2. 2
3. 0
4. 1
- 5.

Answer : 4

• Question No. 9

Which of the following is **TRUE**?

- I. $\sqrt[3]{11} > \sqrt{7} > \sqrt[4]{45}$
- II. $\sqrt{7} > \sqrt[3]{11} > \sqrt[4]{45}$
- III. $\sqrt{7} > \sqrt[4]{45} > \sqrt[3]{11}$
- IV. $\sqrt[4]{45} > \sqrt{7} > \sqrt[3]{11}$

Options :

1. Only I
2. Only II
3. Only III
4. Only IV
- 5.

Answer : Only III

• Question No. 10

A and B are positive integers. If $A + B + AB = 65$, then what is the difference between A and B ($A, B \leq 15$)?

Options :

1. 3
2. 4
3. 5
4. 6
- 5.

Answer : 5

• Question No. 11

What is the value of $14^3 + 16^3 + 18^3 + \dots + 30^3$?

Options :

1. 134576
2. 120212
3. 115624
4. 111672
- 5.

Answer : 111672

- Question No. 12

What is the value of

$$\sqrt{4600 + \sqrt{540 + \sqrt{1280 + \sqrt{250 + \sqrt{36}}}}} ?$$

Options :

1. 69
2. 68
3. 70
4. 72
- 5.

Answer : 68

- Question No. 13

If $x + y + z = 0$, then what is the value of $(3y^2 + x^2 + z^2)/(2y^2 - xz)$?

Options :

1. 2
2. 1
3. $3/2$
4. $5/3$
- 5.

Answer : 2

- Question No. 14

If $P = 7 + 4\sqrt{3}$ and $PQ = 1$, then what is the value of $1/P^2 + 1/Q^2$?

Options :

1. 196
2. 194
3. 206
4. 182
- 5.

Answer : 194

• Question No. 15

If $a^3 + 3a^2 + 9a = 1$, then what is the value of $a^3 + (3/a)$?

Options :

1. 31
2. 26
3. 28
4. 24
- 5.

Answer : 28

• Question No. 16

x, y and z are real numbers. If $x^3 + y^3 + z^3 = 13$, $x + y + z = 1$ and $xyz = 1$, then what is the value of $xy + yz + zx$?

Options :

1. -1
2. 1
3. 3
4. -3
- 5.

Answer : -3

• Question No. 17

If $(a + b)/c = 6/5$ and $(b + c)/a = 9/2$, then what is the value of $(a + c)/b$?

Options :

1. $9/5$
2. $11/7$
3. $7/11$
4. $7/4$
- 5.

Answer : $7/4$

• Question No. 18

If $x^3 + y^3 + z^3 = 3(1 + xyz)$, $P = y + z - x$, $Q = z + x - y$ and $R = x + y - z$, then what is the value of $P^3 + Q^3 + R^3 - 3PQR$?

Options :

1. 9
2. 8
3. 12
4. 6
- 5.

Answer : 12

• Question No. 19

If $x_1 x_2 x_3 = 4(4 + x_1 + x_2 + x_3)$, then what is the value of $[1/(2 + x_1)] + [1/(2 + x_2)] + [1/(2 + x_3)]$?

Options :

1. 1
2. $1/2$
3. 2

4. $\frac{1}{3}$

5.

Answer : $\frac{1}{2}$

• Question No. 20

If α and β are the roots of equation $x^2 + x + 1 = 0$, then which equation will have roots α^3 and β^3

Options :

1. $x^2 + 2x + 1 = 0$

2. $x^2 - 2x - 1 = 0$

3. $x^2 + 3x - 1 = 0$

4. $x^2 - 3x + 1 = 0$

5.

Answer : $x^2 + 2x + 1 = 0$

• Question No. 21

If $3x + 5y + 7z = 49$ and $9x + 8y + 21z = 126$, then what is the value of y ?

Options :

1. 4

2. 2

3. 3

4. 5

5.

Answer : 3

• Question No. 22

Cost of 4 pens, 6 note books and 9 files is Rs 305. Cost of 3 pens, 4 notebooks and 2 files is Rs 145. What is the cost (in Rs) of 5 pens, 8 notebooks and 16 files?

Options :

1. 415
2. 465
3. 440
4. Cannot be determined
- 5.

Answer : 465

• Question No. 23

ABC is a right angled triangle. $\angle BAC = 90^\circ$ and $\angle ACB = 60^\circ$. What is the ratio of the circum radius of the triangle to the side AB?

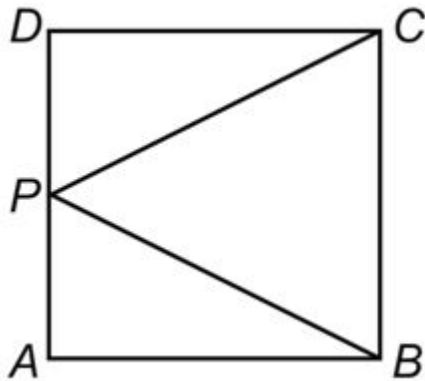
Options :

1. 1 : 2
2. $1 : \sqrt{3}$
3. $2 : \sqrt{3}$
4. 2 : 3
- 5.

Answer : $1 : \sqrt{3}$

• Question No. 24

in the given figure, ABCD is a square whose side is 4 cm. P is a point on the side AD. What is the minimum value (in cm) of BP + CP ?



Options :

1. $4\sqrt{5}$
2. $4\sqrt{4}$
3. $6\sqrt{3}$
4. $4\sqrt{6}$
- 5.

Answer : $4\sqrt{5}$

• Question No. 25

Triangle ABC is similar to triangle PQR and $AB : PQ = 2 : 3$. AD is the median to the side BC in triangle ABC and PS is the median to the side QR in triangle PQR. What is the value of $(BD/QS)^2$?

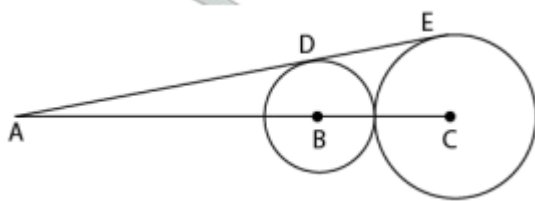
Options :

1. $3/5$
2. $4/9$
3. $2/3$
4. $4/7$
- 5.

Answer : $4/9$

• Question No. 26

In the given figure, B and C are the centres of the two circles. ADE is the common tangent to the two circles. If the ratio of the radius of both the circles is 3 : 5 and $AC = 40$, then what is the value of DE ?



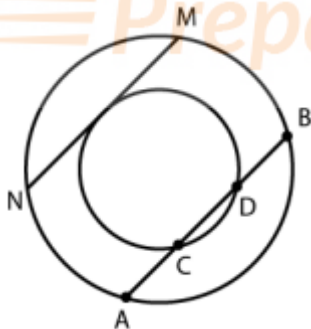
Options :

1. $3\sqrt{15}$
2. $5\sqrt{15}$
3. $6\sqrt{15}$
4. $4\sqrt{15}$
- 5.

Answer : $4\sqrt{15}$

• Question No. 27

In the given figure, $AB = 30$ cm and $CD = 24$ cm. What is the value (in cm) of MN?



Options :

1. 18
2. 9
3. 12
4. 15
- 5.

Answer : 18

• Question No. 28

AB and AC are the two tangents to a circle whose radius is 6 cm. If $\angle BAC = 60^\circ$, then what is the value (in cm) of $\sqrt{AB^2 + AC^2}$?

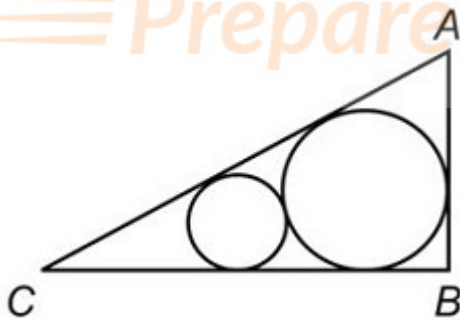
Options :

1. $6\sqrt{6}$
2. $4\sqrt{6}$
3. $9\sqrt{3}$
4. $8\sqrt{3}$
- 5.

Answer : $6\sqrt{6}$

• Question No. 29

In the given figure, ABC is a right angled triangle. $\angle ABC = 90^\circ$ and $\angle ACB = 60^\circ$. If the radius of the smaller circle is 2 cm, then what is the radius (in cm) of the larger circle?



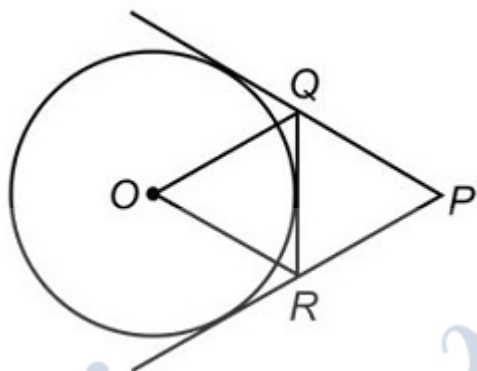
Options :

1. 4
2. 6
3. 4.5
4. 7.5
- 5.

Answer : 6

• Question No. 30

In the given figure, O is centre of the circle. Circle has 3 tangents. If $\angle QPR = 45^\circ$, then what is the value (in degrees) of $\angle QOR$?



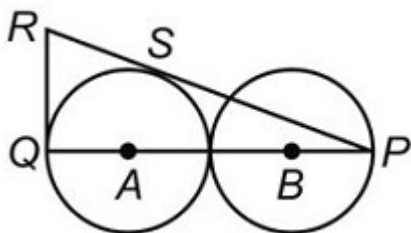
Options :

1. 67.5
2. 72
3. 78.5
4. 65
- 5.

Answer : 67.5

• Question No. 31

In the given figure, two identical circles of radius 4 cm touch each other. A and B are the centres of the two circles. If RQ is a tangent to the circle, then what is the length (in cm) of RQ?



Options :

1. $3\sqrt{3}$
2. $2\sqrt{6}$
3. $4\sqrt{2}$
4. $6\sqrt{2}$
- 5.

Answer : $4\sqrt{2}$

• Question No. 32

The radius of two circles is 3 cm and 4 cm. The distance between the centres of the circles is 10 cm. What is the ratio of the length of direct common tangent to the length of the transverse common tangent?

Options :

1. $\sqrt{51} : \sqrt{68}$
2. $\sqrt{33} : \sqrt{17}$
3. $\sqrt{66} : \sqrt{51}$
4. $\sqrt{28} : \sqrt{17}$
- 5.

Answer : $\sqrt{33} : \sqrt{17}$

• Question No. 33

ABC is a triangle. AB = 5 cm, AC = $\sqrt{41}$ cm and BC = 8 cm. AD is perpendicular to BC. What is the area (in cm^2) of triangle ABD?

Options :

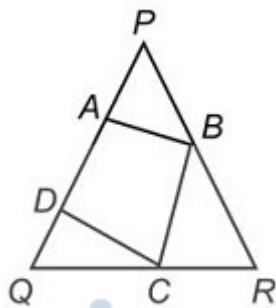
1. 12
2. 6
3. 10
4. 20

5.

Answer : 6

• Question No. 34

In the given figure, PQR is a triangle and quadrilateral ABCD is inscribed in it. QD = 2 cm, QC = 5 cm, CR = 3 cm. BR = 4 cm. PB = 6 cm. PA = 5 cm and AD = 3 cm. What is the area (in cm^2) of the quadrilateral ABCD?



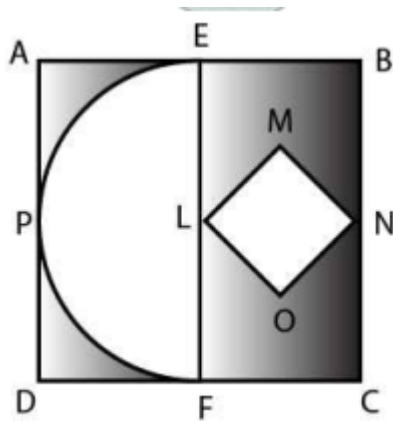
Options :

1. $(23\sqrt{21})/4$
2. $(15\sqrt{21})/4$
3. $(17\sqrt{21})/5$
4. $(23\sqrt{21})/5$
- 5.

Answer : $(17\sqrt{21})/5$

• Question No. 35

In the given figure, ABCD is a square of side 14 cm. E and F are mid points of sides AB and DC respectively. EPF is a semicircle whose diameter is EF. LMNO is a square. What is the area (in cm^2) of the shaded region?



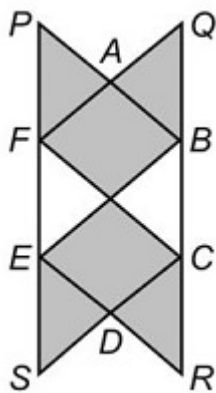
Options :

1. 108.5
2. 94.5
3. 70
4. 120
- 5.

Answer : 94.5

- Question No. 36

In the given figure, ABCDEF is a regular hexagon whose side is 6 cm. APF, QAB, DCR and DES are equilateral triangles. What is the area (in cm^2) of the shaded region?



Options :

1. $24\sqrt{3}$
2. $18\sqrt{3}$
3. $72\sqrt{3}$
4. $36\sqrt{3}$
- 5.

Answer : $72\sqrt{3}$

• Question No. 37

Length and breadth of a rectangle are 8 cm and 6 cm respectively. The rectangle is cut on its four vertices such that the resulting figure is a regular octagon. What is the side (in cm) of the octagon?

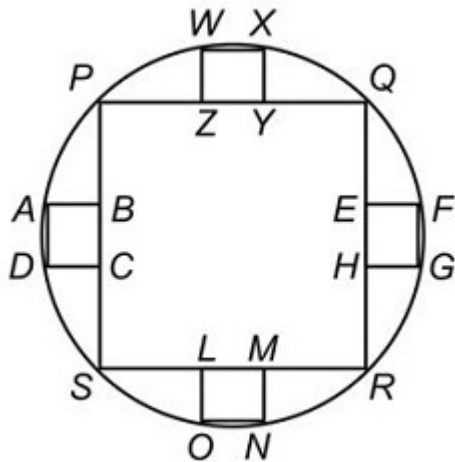
Options :

1. $3(\sqrt{11}) - 7$
2. $5(\sqrt{13}) - 8$
3. $4(\sqrt{7}) - 11$
4. $6(\sqrt{11}) - 9$
- 5.

Answer : $3(\sqrt{11}) - 7$

• Question No. 38

In the given figure, radius of a circle is $14\sqrt{2}$ cm. PQRS is a square. EFGH, ABCD, WXYZ and LMNO are four identical squares. What is the total area (in cm^2) of all the small squares?



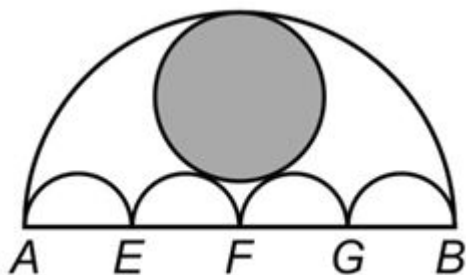
Options :

1. 31.36
2. 125.44
3. 62.72
4. 156.8
- 5.

Answer : 125.44

• Question No. 39

In the given figure, AB, AE, EF, FG and GB are semicircles. $AB = 56$ cm and $AE = EF = FG = GB$. What is the area (in cm^2) of the shaded region?



Options :

1. 414.46

2. 382.82

3. 406.48

4. 394.24

5.

Answer : 394.24

• Question No. 40

A right prism has a square base with side of base 4 cm and the height of prism is 9 cm. The prism is cut in three parts of equal heights by two planes parallel to its base. What is the ratio of the volume of the top, middle and the bottom part respectively?

Options :

1. 1 : 8 : 27

2. 1 : 7 : 19

3. 1 : 8 : 20

4. None of These

5.

Answer : None of These

• Question No. 41

Radius of base of a hollow cone is 8 cm and its height is 15 cm. A sphere of largest radius is put inside the cone. What is the ratio of radius of base of cone to the radius of sphere?

Options :

1. 5 : 3

2. 4 : 1

3. 2 : 1

4. 7 : 3

5.

Answer : 5 : 3

• Question No. 42

The ratio of curved surface area of a right circular cylinder to the total area of its two bases is 2 : 1. If the total surface area of cylinder is 23100 cm^2 , then what is the volume (in cm^3) of cylinder?

Options :

1. 247200
2. 269500
3. 312500
4. 341800
- 5.

Answer : 269500

• Question No. 43

A solid cylinder has radius of base 14 cm and height 15 cm. 4 identical cylinders are cut from each base as shown in the given figure. Height of small cylinder is 5 cm. What is the total surface area (in cm^2) of the remaining part?



Options :

1. 3740
2. 3432
3. 3124
4. 2816
- 5.

Answer : 3432

- Question No. 44

10 identical solid spherical balls of radius 3 cm are melted to form a single sphere. In this process 20% of solid is wasted. What is the radius (in cm) of the bigger sphere?

Options :

1. 24
2. 12
3. 8
4. 6
- 5.

Answer : 6

- Question No. 45

The radius of base of a solid cylinder is 7 cm and its height is 21 cm. It is melted and converted into small bullets. Each bullet is of same size. Each bullet consisted of two parts viz. a cylinder and a hemisphere on one of its base. The total height of bullet is 3.5 cm and radius of base is 2.1 cm. Approximately how many complete bullets can be obtained?

Options :

1. 83
2. 89
3. 74
4. 79
- 5.

Answer : 83

- Question No. 46

A cuboid of size 50 cm × 40 cm × 30 cm is cut into 8 identical parts by 3 cuts. What is the total surface area (in cm²) of all the 8 parts?

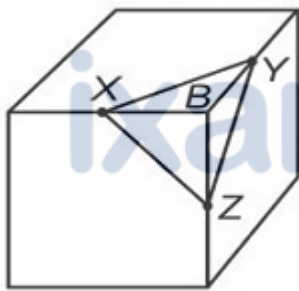
Options :

1. 11750
2. 14100
3. 18800
4. 23500
- 5.

Answer : 18800

• Question No. 47

A right triangular pyramid XYZB is cut from cube as shown in figure. The side of cube is 16 cm. X, Y and Z are mid points of the edges AB, BC and CD respectively. What is the total surface area (in cm^2) of the pyramid?



Options :

1. $48[(\sqrt{3}) + 1]$
2. $24[4 + (\sqrt{3})]$
3. $28[6 + (\sqrt{3})]$
4. $32[3 + (\sqrt{3})]$
- 5.

Answer : $32[3 + (\sqrt{3})]$

• Question No. 48

What is the value of $\frac{(\sin x + \sin y)(\sin x - \sin y)}{(\cos x + \cos y)(\cos x - \cos y)}$?

Options :

1. 0
2. 1
3. -1
4. 2
- 5.

Answer : 1

• Question No. 49

What is the value of $[(\tan 5^\circ + \tan 3^\circ)/4 \cos 4^\circ (\tan 5^\circ - \tan 3^\circ)]$?

Options :

1. $\sin 2^\circ$
2. $\cos 2^\circ$
3. $\tan 4^\circ$
4. $\cot 2^\circ$
- 5.

Answer : $\cos 2^\circ$

• Question No. 50

What is the value of $(4/3) \cot^2 (p/6) + 3 \cos^2 (150^\circ) - 4 \operatorname{cosec}^2 45^\circ + 8 \sin (p/2)$?

Options :

1. 25/4
2. 1
3. -7/2
4. 13/2
- 5.

Answer : 25/4

• Question No. 51

What is the value of $\sin (B - C) \cos (A - D) + \sin (A - B) \cos (C - D) + \sin (C - A) \cos (B - D)$?

Options :

1. $3/2$
2. -3
3. 1
4. 0
- 5.

Answer : 0

• Question No. 52

What is the value of

$$\frac{\left\{ \left[4 \cos(90 - A) \sin^3(90 + A) \right] - \left[4 \sin(90 + A) \cos^3(90 - A) \right] \right\}}{\cos\left(\frac{180 + 8A}{2}\right)} ?$$

Options :

1. 1
2. -1
3. 0
4. 2
- 5.

Answer : -1

• Question No. 53

What is the value of $\cos [(180 - \theta)/2] \cos [(180 - 9\theta)/2] + \sin [(180 - 3\theta)/2] \sin [(180 - 13\theta)/2]$?

Options :

1. $\sin 2\theta \sin 4\theta$
2. $\cos 2\theta \cos 6\theta$
3. $\sin 2\theta \sin 6\theta$
4. $\cos 2\theta \cos 4\theta$
- 5.

Answer : $\cos 2\theta \cos 6\theta$

• Question No. 54

What is the value of $[\tan^2 (90 - \theta) - \sin^2 (90 - \theta)] \operatorname{cosec}^2 (90 - \theta) \cot^2 (90 - \theta)$?

Options :

1. 0
2. 1
3. -1
4. 2
- 5.

Answer : 1

• Question No. 55

Two points P and Q are at the distance of x and y (where $y > x$) respectively from the base of a building and on a straight line. If the angles of elevation of the top of the building from points P and Q are complementary, then what is the height of the building?

Options :

1. xy
2. $\sqrt{(y/x)}$
3. $\sqrt{(x/y)}$

4. $\sqrt{(xy)}$

5.

Answer : $\sqrt{(xy)}$

• Question No. 56

The tops of two poles of height 60 metres and 35 metres are connected by a rope. If the rope makes an angle with the horizontal whose tangent is $5/9$ metres, then what is the distance (in metres) between the two poles?

Options :

1. 63

2. 30

3. 25

4. 45

5.

Answer : 45

• Question No. 57

A Navy captain going away from a lighthouse at the speed of $4[(\sqrt{3}) - 1]$ m/s. He observes that it takes him 1 minute to change the angle of elevation of the top of the lighthouse from 60° to 45° . What is the height (in metres) of the lighthouse?

Options :1. $240\sqrt{3}$ 2. $480[(\sqrt{3}) - 1]$ 3. $360\sqrt{3}$ 4. $280\sqrt{2}$

5.

Answer : $240\sqrt{3}$

Direction:

Read the following Table and Answer the questions that follow:

The table given below shows the number of applicants who have applied for exam at various centres as percentage of total number of applicants. The table also shows the number online applicants and absent applicants as a percentage of total applicants of each centre. Total number of applicants is 1200000.

Exam Centre	Total Applicants	Online applicants	Absent applicants
F	15%	30%	36%
G	25%	44%	25%
H	20%	52%	32%
J	24%	46%	18%
K	16%	38%	20%

- Question No. 58

If A equals to 15% of total applicants who are present at exam centre F and B equals to present applicants at exam centre K, then A is what percent of B?

Options :

1. 18.18
2. 11.25
3. 13.33
4. 14.28
- 5.

Answer : 11.25

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K	16%	38%	20%

- Question No. 59

Total number of offline applicants from exam centre H, K and F are how much less than the total number of present applicants from exam centre G and J?

Options :

1. 111420
2. 100920
3. 127370
4. 109990
- 5.

Answer : 100920

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H	20%	52%	32%
J	24%	46%	18%
K	16%	38%	20%

- Question No. 60

What are the total number of offline applicants from the exam centre F, H, J and G?

Options :

1. 393720
2. 963000
3. 564720

4. 428540

5.

Answer : 564720

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G	25%	44%	25%
H	20%	52%	32%
J	24%	46%	18%
K	16%	38%	20%

- Question No. 61

What is the ratio of total number of present applicants from exam centre K to total number of offline applicants from exam centre J?

Options :

1. 40 : 41
2. 80 : 81
3. 10 : 9
4. 7 : 11
- 5.

Answer : 80 : 81

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Exam Centre	Total Applicants	Online applicants	Absent applicants
F	15%	30%	36%
G	25%	44%	25%
H	20%	52%	32%
J	24%	46%	18%
K	16%	38%	20%

- Question No. 62

What are the total number of present applicants from exam centre H and G together?

Options :

1. 238200
2. 151800
3. 388200
4. 442650
- 5.

Answer : 388200

- Question No. 63

Solution A contains 10% acid and solution B contains 30% acid. In what ratio should solution A be mixed with Solution B to obtain a mixture with 25% acid?

Options :

1. 1 : 2
2. 3 : 1
3. 1 : 3
4. 2 : 1
- 5.

Answer : 1 : 3

- Question No. 64

In what ratio should coffee powder costing Rs 2500/kg be mixed with coffee powder costing Rs 1500/kg so that the cost of the mixture is Rs 2250/kg?

Options :

1. 1 : 4
2. 4 : 1
3. 3 : 1
4. 1 : 3
- 5.

Answer : 3 : 1

- Question No. 65

A and B started a partnership business investing in the ratio of 3 : 8. C joined them after 4 months with an amount equal to $\frac{3}{4}$ th of B. What was their profit (in Rs) at the end of the year if C got Rs 24,000 as his share?

Options :

1. 120000
2. 150000
3. 90000
4. 180000
- 5.

Answer : 90000

- Question No. 66

A and B invest in a business in the ratio 4 : 5. After 10 months B leaves the business after withdrawing his investment. In the first year the business made a profit of Rs 49,000. What is B's share (in Rs) of this profit?

Options :

1. 25000
2. 20000
3. 18000
4. 22000
- 5.

Answer : 25000

• Question No. 67

Working together A and B can do a job in 40 days, B and C in 36 days and all three together in 24 days. In how many days can B alone do the job?

Options :

1. 60
2. 90
3. 72
4. 120
5. none of these

Answer : 90

• Question No. 68

A, B and C can do a job working alone in 50, 75 and 20 days respectively. They all work together for 4 days, then C quits. How many days will A and B take to finish the rest of the job?

Options :

1. 20
2. 30
3. 18
4. 24
- 5.

Answer : 20

• Question No. 69

A can do 50% of the job in 16 days, B can do $\frac{1}{4}$ th of the job in 24 days. In how many days can they do $\frac{3}{4}$ th of the job working together?

Options :

1. 24
2. 9
3. 21
4. 18
- 5.

Answer : 18

• Question No. 70

A and B can together complete a task in 18 hours. After 6 hours A leaves. B takes 36 hours to finish rest of the task. How many hours would A have taken to do the task if he worked alone?

Options :

1. 54
2. 45
3. 21
4. 27
- 5.

Answer : 27

• Question No. 71

1 packet of biscuits costs Rs 16 but a pack of 4 of the same packet of biscuits costs Rs 56. What is the effective discount (in %) on the pack?

Options :

1. 8
2. 10
3. 7.5
4. 12.5
- 5.

Answer : 12.5

• Question No. 72

The cost price of an article is Rs x . It is marked up by 200%. It is sold at Rs 540 after giving 25% discount. What is the value of x (in Rs)?

Options :

1. 360
2. 250
3. 300
4. 240
- 5.

Answer : 240

• Question No. 73

A Rs 750 tin of cheese is offered at 8% discount and a Rs 1,250 tin of butter at 20% discount. If we buy 5 tins of cheese and 3 tins of butter, what is the effective discount we get (in %)?

Options :

1. 12
2. 15
3. 14
4. 16
- 5.

Answer : 14

• Question No. 74

The selling price of an article is Rs 816 if the discount on it is 15%. What would be the selling price of the article (in Rs) if the discount on it is 25%?

Options :

1. 750
2. 720
3. 800
4. 700
- 5.

Answer : 720

• Question No. 75

The entry ticket at a fun park was increased in the ratio 7 : 9, due to which footfalls fell in the ratio 13 : 11. What is the new daily collection (in Rs), if the daily collection before the price hike was Rs 2,27,500?

Options :

1. 237500
2. 247500
3. 232500
4. 242500
- 5.

Answer : 247500

• Question No. 76

If $6A = 4B = 9C$; What is $A : B : C$?

Options :

1. 6 : 4 : 9

2. 9 : 4 : 6

3. 4 : 9 : 6

4. 6 : 9 : 4

5.

Answer : 6 : 9 : 4

• Question No. 77

If 50 less had applied and 25 less selected, the ratio of selected to unselected would have been 9 : 4. So how many candidates had applied if the ratio of selected to unselected was 2 : 1.

Options :

1. 125

2. 250

3. 375

4. 500

5.

Answer : 375

• Question No. 78

What is the fourth proportional to 189, 273 and 153?

Options :

1. 117

2. 299

3. 221

4. 187

5.

Answer : 221

- Question No. 79

Rs 11,550 has to be divided between X, Y & Z such that X gets $\frac{4}{5}$ of what Y gets and Y gets $\frac{2}{3}$ of what Z gets.

How much more does Z get over X (in Rs)?

Options :

1. 7200
2. 1800
3. 2139
4. 2450
- 5.

Answer : 2450

- Question No. 80

Before a battle the ratio of tanks to planes in an army was 5 : 3. During the war 1000 tanks were destroyed and 800 planes were destroyed. The ratio of tanks to planes became 2 : 1. What is the number of tanks after the war.

Options :

1. 2000
2. 1000
3. 3000
4. 4000
- 5.

Answer : 2000

- Question No. 81

The average marks of 50 students in an examination was 65. It was later found that the marks of one student had been wrongly entered as 83 instead of 38. The correct average is?

Options :

1. 63.9
2. 64.5
3. 64.7
4. 64.1
- 5.

Answer : 64.1

• Question No. 82

In a class of 50 students there are 22 girls who scored an average of 35 marks in the test. What is the average marks of the boys if the class average is 42 marks?

Options :

1. 50
2. 52.5
3. 47.5
4. 55
- 5.

Answer : 47.5

• Question No. 83

The average of 41 consecutive odd numbers is 49. What is the largest number.

Options :

1. 89
2. 91
3. 93
4. 95
- 5.

Answer : 89

- Question No. 84

A batsman scores 87 runs in the 21st match of his career. His average runs per match increases by 2. What was his average before the 21st match.

Options :

1. 45
2. 46
3. 44
4. 43
- 5.

Answer : 45

- Question No. 85

Oil equal to 20% of the weight of ground nut is extracted in a mill. The matter left after extraction is sold as cattle feed at the rate of Rs 12.5/kg. The groundnuts are bought at Rs 20/kg. The processing cost is Rs 5/kg. At what price (Rs per kg) should the oil be sold to earn 20% profit on total costs (Total cost = Cost of groundnuts and Processing costs)?

Options :

1. 250
2. 150
3. 200
4. 100
- 5.

Answer : 100

- Question No. 86

If a vendor sells a coconut at Rs 14.4 he makes 10% loss. If he wants to make 25% profit, then at what price (in Rs) should he sell?

Options :

- 1. 18
- 2. 20
- 3. 16
- 4. 22
- 5.

Answer : 20

• Question No. 87

At a village trade fair a man buys a horse and a camel together for Rs 51,250. He sold the horse at a profit of 25 % and the camel at a loss of 20 %. If he sold both the animals at the same price, then the cost price of the cheaper animal was Rs _____.

Options :

- 1. 6600
- 2. 7500
- 3. 25000
- 4. 20000
- 5.

Answer : 20000

• Question No. 88

On a certain item profit is 150%. If the cost price increases by 25% what will be the new profit margin (in %)?

Options :

- 1. 25
- 2. 50
- 3. 100
- 4. 75

5.

Answer : 100

- Question No. 89

40% are the passing marks. A student gets 250 marks yet fails by 38 marks. What is the maximum marks?

Options :

1. 720
2. 750
3. 800
4. 840
- 5.

Answer : 720

- Question No. 90

Ravi is 12 years younger than Surya. Ravi's age is 40% of the sum of his and Surya's age. What will be Surya's age 9 years hence?

Options :

1. 36
2. 24
3. 33
4. 45
- 5.

Answer : 45

- Question No. 91

5% of a = b, then b% of 20 is the same as _____.

Options :

1. 20% of $a/2$
2. 50% of $a/20$
3. 50% of $a/2$
4. 20% of $a/20$
- 5.

Answer : 20% of $a/20$

• Question No. 92

A man's annual income has increased by Rs 5 lakhs but the tax on income that he has to pay has reduced from 12% to 10%. He now pays Rs 10,000 more income tax. What is his increased income (in Rs lakhs)?

Options :

1. 20
2. 25
3. 15
4. 10
- 5.

Answer : 25

• Question No. 93

A racing car going at an average speed of 108 km/hr takes 15 minutes to complete a lap on a racing track. By how much should it increase its speed (in km/hr) to complete the lap in 12 minutes?

Options :

1. 24
2. 21
3. 27
4. 30

5.

Answer : 27

- Question No. 94

Train A takes 45 minutes more than train B to travel a distance of 450 km. Due to engine trouble speed of train B falls by a quarter, so it takes 30 minutes more than Train A to complete the same journey. What is the speed of Train A (in km/hr)?

Options :

1. 90
2. 120
3. 100
4. 110
- 5.

Answer : 100

- Question No. 95

Two cars A and B travel from one city to another, at speeds of 72 km/hr and 90 km/hr respectively. If car B takes 1 hour lesser than car A for the journey, then what is the distance (in km) between the two cities?

Options :

1. 270
2. 360
3. 240
4. 400
- 5.

Answer : 360

- Question No. 96

B starts 4 minutes after A from the same point, for a place at a distance of 7 miles from the starting point. A on reaching the destination turns back and walks a mile where he meets B. If A's speed is a mile in 8 minutes then B's speed is a mile in _____ minutes.

Options :

1. 9
2. 12
3. 10
4. 8
- 5.

Answer : 10

• Question No. 97

If the amount on a certain principal in 3 years at 12% rate of interest compounded annually is Rs 12,000, what will be the amount (in Rs) after the 4th year?

Options :

1. 14330
2. 15440
3. 13440
4. 14550
- 5.

Answer : 13440

• Question No. 98

The amount (in Rs) received at 10% per annum compound interest after 3 yrs is Rs 1,19,790. What was the principal?

Options :

1. 90000
2. 1,00,000

3. 80000

4. 75000

5.

Answer : 90000

• Question No. 99

In how many months will Rs 8,000 yield Rs 2,648 as compound interest at 20% per annum compounded semi-annually?

Options :

1. 18

2. 24

3. 12

4. 30

5.

Answer : 18

• Question No. 100

What is the rate of interest (in %) if simple interest earned on a certain sum for the 3rd year is Rs 2,000 and compound interest earned in 2 years is Rs 4,160?

Options :

1. 8

2. 10

3. 12

4. 6

5.

Answer : 8

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