Volume Calculation - Online Quiz

Following quiz provides Multiple Choice Questions (MCQs) related to **Volume Calculation**. You will have to read all the given answers and click over the correct answer. If you are not sure about the answer then you can check the answer using **Show Answer** button. You can use **Next Quiz** button to check new set of questions in the quiz.

Q 1 - The region of the base of a rectangular tank is 6500 cm^2 and the volume of the water contained in it in 2.6 cubic meter. The profundity of the water in the tank is:

A - 2.5 m

B - 3 m

C - 5.5 m

D - 4 m

Answer : D

Explanation

```
L*b= 6500cm²  , L*b*d=2.6m³=(2.6*100*100*100) cm³
∴ d = (2.6*100*100*100)/6500 cm = (2.6*100*100*100)/6500*100 = 4m
∴ Depth = 4m
```

Hide Answer

Q 2 - In a shower, 5 cm of downpour falls. The volume of water that falls on 2 Hectares of ground are:

A - 100 m^3

B - 1000 m^3

C - 10000 m^3

D - 10 m^3

Answer : B

Explanation

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Volume = (2*10000*5/100) m³=1000 m³
```

Hide Answer

Q 3 - The measurements of a cuboid are a, b,c units, its volume is V cubic units and its entire surface zone is S sq. units. At that point, 1/V=?

A - S/2(a+b+c)

B - 2/S(1/a + 1/b+ 1/c)

C - 2S(a+b+c)

D - 2S/(a+b+c)

Answer : B

Explanation

```
1/V =(1/S*S/V) = 2(ab+bc+ca)/s*abc=   2/S(1/a+1/b+1/c)
```

Hide Answer

Q 4 - Water streams into a tank 200m *150m through a rectangular funnel 1.5m*1.25m at the rate of 20 kmph. In what the reality of the situation will become obvious eventually water rise By 2 meters?

A - 76 min

B - 80 min

C - 90 min

D - 96 min

Answer : D

Explanation

Volume of the water flown in the tank= (200*150*2) m³= 60000m³
Volume flown per hour = (3/2*125/100*20*1000) m³=37500m³
Time taken = 60000/37500 = 8/5 hrs = (8/5*60) min. = 96 min.

Hide Answer

Q 5 - The aggregate surface zone of a solid shape of side 27 cm is:

A - 2916 cm^2

B - 729 cm^2

C - 4374 cm^2

D - 19683 cm^2

Answer : C

Explanation

Surface area =6a^2= (6*27*27) cm^2= 4374cm^2

Hide Answer

Q 6 - The numerical estimations of volumes and entire surface region of a solid shape are equivalent. The region of every face of such 3D square (cube) has the numerical worth:

A - 1

B - 6

C - 12

D - 36

Answer : D

Explanation

$a^3 = 6a^2 \Rightarrow a = 6 \Rightarrow a^2 = 6^2 = 36$

Hide Answer

Q 7 - The measurement of the base of a tube shaped drum is 35dm and its tallness is 24 dm. It is brimming with lamp oil. What number of tins each of size 25cm *22cm* 35 cm can be loaded with lamp fuel from the drum?

A - 120

B - 600

C - 1020

D - 1200

Answer : D

Explanation

```
r= 35/2 dm=(35/2*10)cm= 175 cm , h=24 dm = 240cm
Volume of drum = (22/7*175*175*240) cm³
=(22*25*175*240) cm³
Volume of a tin = (25*22*35) cm³
Number of tin = (22*25*175*240)/ (25*22*35) = 1200
```

Show Answer

Q 8 - Water streams out through a round funnel whose inner measurement is 2cm, at the rate of 6 meters for each second into a barrel shaped tank, the range of whose base is 60 cm. By what amount will the level of water ascend in 30 minutes?

A - 2 m

B - 3 m

C - 4 m

D - 5 m

Answer : B

Explanation

```
Length flown in 30 minutes = (6*60*30) m =   10800 m
r = 1/100m, h = 10800 m
Volume = (π*1/100*1/100*10800) m³
Let the height of the water level be h meters. Then,
π*60/100*60/100*h = π*1/100*1/100*10800
⇒ h = (108/100*5/3*5/3) = 3m
```

Hide Answer

Q 9 - The range and the base and stature of a barrel are in the proportion 2:3 and its volume is 12936 cm^3. The entire surface territory of the barrel is:

A - 3080 cm^2

B - 38808 cm^2

C - 25872 cm^2

D - 2587.2 cm^2

Answer : A

Explanation

```
Let radius =2x cm and height= 3x cm
Then volume = πr²h [22/7(2x) ²*3x] cm³= (264/7) x³ cm³
(264/7) x³= 12936 ⇒x³= (12936*7/264) =343= (7)³⇒x= 7
∴ Radius =14cm, height = 21 cm
Total surface area = 2πr (h+r) = [2*22/7*14(21+14)] cm²= 3080 cm²
```

Hide Answer

Q 10 - The volume of a circle is 4851 cm^3. Its bended surface range is:

A - 1716 cm^2

B - 1386 cm^2

C - 1625 cm^2

D - 3087 cm^2

Answer : B

Explanation

```
4/3πr³= 4851 ⇒ 4/3*22/7*r ³= 4851
⇒r³ = (4851*21/88) = (441*21)/8 = (21/2)³ ⇒r = 21/2
Curved surface area = 4πr²= (4*22/7*21/2*21/2) cm²=1386 cm²
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Show Answer