Unit 1 - How to access the portal

Assignment 0

The due date for submitting this assignment has passed. Due on 2018-08-07, 23:59 IST. As per our records you have not submitted this assignment.

1) What is the possible way to destruct explosive easily?
   - (a) By burying under ground
   - (b) By throwing in water
   - (c) by burning them throwing in fire
   - (d) cannot be destroyed

No, the answer is incorrect.
Score: 0
Accepted Answers:
(c) by burning them throwing in fire

2) S- wave can travel through _____________
   - (a) Only in solid
   - (b) Only in liquid
   - (c) Only in air
   - (d) Both solid and liquid

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) Only in solid

3) The number of cycles a wave completes in one second is called?
   - (a) time period
   - (b) frequency
   - (c) energy
   - (d) wavelength

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) time period
5) Which of the following curve represents the relationship $xy=c$, where $c$ is a positive constant.

- (a) I
- (b) II
- (c) III
- (d) IV

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) 25

6) The position vector of a moving particle is given by $\mathbf{r}(t) = t\mathbf{i} + t\mathbf{j} + t\mathbf{2k}$. The acceleration of the particle in the direction of the motion is

- (a) 0
- (b) 60$t^2i + 2k$
- (c) 6$t^2i + 4tj + 2k$
- (d) 6$t^2i + 2k$

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) 25

7) The largest area of a rectangular shaft for a given constant perimeter is obtained when length is

- (a) 2.5 times of breadth
- (b) 1.5 times of breadth
- (c) 2 times of breadth
(d) Equal to breadth
No, the answer is incorrect.
Score: 0
Accepted Answers:
(d) Equal to breadth

8) The value \( \int_{0}^{4} \sqrt{16 - x^2} \, dx \) is

- (a) 12.57
- (b) 50.24
- (c) 25.12
- (d) 3.14

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) 12.57

9) Which wave can travel through vacuum?

- (a) P-wave
- (b) S-wave
- (c) Rayleigh wave
- (d) Radio wave

No, the answer is incorrect.
Score: 0
Accepted Answers:
(d) Radio wave

10) A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

- (a) 12
- (b) 15
- (c) 16
- (d) 18

No, the answer is incorrect.
Score: 0
Accepted Answers:
(b) 15

11) A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20

- (a) 3
- (b) 4
- (c) 5
- (d) 6

No, the answer is incorrect.
Score: 0
Accepted Answers:
(c) 5

12) A and B invest in a business in the ratio 3 : 2. If 5% of the total profit goes to charity and A's share is Rs. 895, the total profit (Rs.) is:
1320,000 tonne of Iron ore has to be excavated by a single blasting. Thus, holes are drilled to place explosive inside them. Each hole is expected to blast nearly 200 m³ of iron ore. The Iron ore has a density of 5 gm/cc (5 gram/ cubic centimeter). So, find out the number of holes required to be drilled to achieve this result.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(b) 1500

A driller is drilling 20 number of holes of 10 m depth with a diameter of 150 mm. It has been planned to fill each hole up to a height of 8 m with the explosives. The density of that explosive is 0.8 gm/cc. Find the amount of explosives required in terms of kilograms.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2259,2262

A force \( \vec{p} = 2\hat{i} - 5\hat{j} + 6\hat{k} \) acts on a particle. The particle is moved from point A to point B, where the position vectors of A and B are \( 6\hat{i} + \hat{j} - 3\hat{k} \) and \( 4\hat{i} - 3\hat{j} - 2\hat{k} \) respectively. The work done is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 22