

APTITUDE QUIZ

1. A man standing at a point P is watching the top of a tower, which makes an angle of elevation of 30° with the man's eye. The man walks some distance towards the tower to watch its top and the angle of the elevation becomes 60° . What is the distance between the base of the tower and the point P ?

- A. 43 units
- B. 8 units
- C. 12 units
- D. None of these
- E. Data inadequate

2. The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is:

- A. 2.3 m
- B. 4.6 m
- C. 7.8 m
- D. 9.2 m

3. The angle of elevation of the sun, when the length of the shadow of a tree $\frac{1}{3}$ times the height of the tree, is:

- A. 30°
- B. 45°

C. 60°

D. 90°

4. From height of 8 mts a ball fell down and each time it bounces half the distance back. What will be the distance travelled

A. 24

B. 23

C. 19

D. None of these

5. The base of a triangular field is three times its altitude. If the cost of cultivating the field at Rs. 24.68 per hectare be Rs. 333.18, find its base and height.

A. Base = 100 m & Height = 200m.

B. Base = 900 m & Height = 300m.

C. Base = 1900 m & Height = 300m.

D. Base = 900 m & Height = 1300m.

6. Find the area of a rhombus one side of which measures 20 cm and one diagonal

A. 32 cm.

B. 22 cm.

C. 52 cm.

D. None of these

7. Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse is observed from the ships are 30 degree and 45 degree respectively. If the lighthouse is 100 m high, the distance between the two ships is:

- A. 276 metre
- B. 273 metre
- C. 270 metre
- D. 263 metre

8. On the two sides of a road are two tall buildings exactly opposite to each other. The height of the taller building is 60 m. If the angle of elevation from the top of the smaller building to the top of the taller one is 30° and the angle of depression from top of the taller building to the foot of the smaller one is 30° , then find the height of the smaller building.

- A. 45 m.
- B. 30 m.
- C. 40 m.
- D. 20 m.

9. Satish was looking at a new building Kohli Towers constructed having height of 200 m. The angle of elevation of the top of building from a point on ground is 30° . What is the distance of the point from the foot of the building?

- A. 166 m
- B. 254 m
- C. 346 m

D. 273 m

10. Jaya Towers and Karuna towers are two tall buildings standing 400 metres apart. Two fast flying birds were sitting on top of these two towers and were aiming at catching the grains put up in one place. Jaya Tower's height is 300 metres and the grains 160 metres apart from Jaya Towers. Both the birds were flying down at the same speed and reached the grains spot at the same time. What is the approximate height of Karuna Towers?

A. 200 m

B. 240 m

C. 160 m

D. 180 m

11. A tree of height 36m is on one edge of a road broke at a certain height. It fell in such a way that the top of the tree touches the other edge of the road. If the breadth of the road is 12m, then what is the height at which the tree broke?

A. 16

B. 24

C. 12

D. 18

12. Two vertical ladders length of 6 m and 11 m are kept vertically at a distance of 12 m. Find the top distance of both ladders?

A. 13

- B. 8
- C. 11
- D. 15

13. Two poles of height 6 meters and 11 meters stand on a plane ground. If the distance between their feet is 12 meters then find the difference in the distance between their tops:

- A. 12m.
- B. 5m.
- C. 13m.
- D. 11m.

14. If a ladder is 100 m long and distance between bottom of ladder and wall is 60 m. What is the maximum size of cube that can be placed between the ladder and wall.

- A. 34.28
- B. 24.28
- C. 21.42
- D. 28.56

15. A ramp makes an angle of 60 degrees with the ground. If I walk up 200 metres on the ramp, at what height from the ground will I reach?

- A. 100 m
- B. 200 m

- C. 150 m
- D. 173.2 m
- E. 120 m

16. An ant smartly moves across a staircase taking the shortest distance. Calculate the distance it takes to reach top to B from A. Given that staircase consist of 2 steps. It also known that the length, breadth and height is 6cm,2cm and 1cm respectively.

- A. 3
- B. $6\sqrt{3}$
- C. $6\sqrt{2}$
- D. None of these

17. The base of a vertical pillar with uniform cross section is a trapezium whose parallel sides are of lengths 10 cm and 20 cm while the other two sides are of equal length. The perpendicular distance between the parallel sides of the trapezium is 12 cm. If the height of the pillar is 20 cm, then the total area, in sq cm, of all six surfaces of the pillar is

- A. 1300
- B. 1340
- C. 1480
- D. 1520

18. 6. In a mixture of a, b, & c, if a and b are mixed in 3:5 ratio and b and c are mixed in 8:5 Ratio and if the final mixture is 35 liters, find the amount of b?

- A. 15.73
- B. 23.5
- C. 15.37
- D. 15.66

19. 15. A Product is supported each week by the same three customer service Representatives (CSR's). Last month the first CSR took 450 calls, the second took 350 calls, and the third took 300 calls. This month the job will consists of 1500 calls. If the three CSR's each increase their work proportionately, how many more calls will the first CSR take this month than last month?

- A. 150
- B. 400
- C. 460
- D. 164

20. Kelly and Chris are moving into a new city. Both of them love books and thus packed several boxes with books. If Chris packed 60% of the total number of boxes, what was the ratio of the number of boxes Kelly packed to the number of boxes Chris packed?

- A. 2:3
- B. 3:4
- C. 3:2

D. None of these

ANSWERS

1. E

2. D

3. A

4. A

5. B

6. A

7. B

8. C

9. C

10. B

11. A

12. A

13. C

14. A

15. D

16. C

17. C

18. A

19. D

20. A