



10. A pole 6 m high casts a shadow  $2\sqrt{3}$  m long on the ground, then the sun's elevation is

- A]  $45^\circ$                       B]  $30^\circ$                       C]  $60^\circ$                       D]  $90^\circ$

11. A pole 10 m high cast a shadow 10 m long on the ground, then the sun's elevation is

- A]  $60^\circ$                       B]  $45^\circ$                       C]  $30^\circ$                       D]  $90^\circ$

12. If the altitude of the sun is  $60^\circ$ , the height of a tower which casts a shadow Of length 30 m is:

- A]  $30\sqrt{3}$  m                      B]  $\frac{30}{3}\sqrt{3}$  m                      C]  $15\sqrt{3}$  m                      D] 15 m

13. If the ratio of height of a tower and the length of its shadow on the ground is  $\sqrt{3} : 1$ , then the angle of elevation of the sun is

- A]  $60^\circ$                       B]  $45^\circ$                       C]  $30^\circ$                       D]  $90^\circ$

14. The length of the string of a kite flying at 100 mts above the ground with the elevation of  $60^\circ$  is:

- A] 100 m                      B]  $100\sqrt{2}$  m                      C]  $\frac{200}{\sqrt{3}}$  m                      D] 200 m

15. The length of the shadow of a 20 m tall pole, on the ground when the sun's elevation is  $45^\circ$  is:

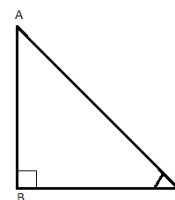
- A] 20 m                      B]  $20\sqrt{2}$ m                      C] 50 m                      D]  $40\sqrt{2}$  m

16. When the angle of elevation of sun is  $30^\circ$  the length of the shadow cast by 50 m high building is.

- A]  $\frac{50}{\sqrt{3}}$  m                      B]  $50\sqrt{3}$  m                      C]  $25\sqrt{3}$ m                      D]  $100\sqrt{3}$ m

17. If  $AB = 4$  m and  $AC = 8$ m, then angle of elevation of A as observed from C is.

- A]  $60^\circ$                       B]  $30^\circ$   
C]  $45^\circ$                       D] Cannot be determined



18. If the angle of depression of an object from a 75 m high tower is  $30^\circ$ , then the distance of the object from the base of tower is

- a]  $25\sqrt{3}$  m                      B]  $50\sqrt{3}$  m                      C]  $75\sqrt{3}$  m                      D] 150m

19. The ratio of the length of a rod and its shadow is  $1 : \sqrt{3}$ , then the angle of elevation of the sun is:  
A]  $30^\circ$                       B]  $45^\circ$                       C]  $60^\circ$
20. A tree casts a shadow 4 m long on the ground, when the angle of elevation Of the sun is  $45^\circ$ . The height of the tree ( in metres ) is:  
A] 3                                  B] 4                                  C] 4.5                              D] 5.2
21. The angle between two tangents drawn from an external point to a circle is  $110^\circ$ . The angle subtended at by the segments joining the points of contact To the centre of circle is:  
A]  $70^\circ$                               B]  $110^\circ$                               C]  $90^\circ$                               D]  $55^\circ$
22. The angle of depression from the top of a tower 12 m high, at a point on the ground is  $30^\circ$ . The distance of the point from the top of the tower is:  
A] 12 m                              B] 6 m                              C]  $12\sqrt{3}$  m                              D] 24 m
23. If a pole of height 6 m casts a shadow  $2\sqrt{3}$  long on the ground, then the Sun's elevation is:  
A]  $30^\circ$                               B]  $60^\circ$                               C]  $45^\circ$                               D]  $90^\circ$
24. The angle of elevation of the top of a tower from a point on the ground is  $45^\circ$ . If the observer is 42 m away from the foot of the tower, the height of the tower is  
A] 63 m                              B] 21 m                              C] 84 m                              D] 42 m
25. If the height and length of the shadow of a man are the same, then the angle of elevation of the sun is  
A]  $30^\circ$                               B]  $60^\circ$                               C]  $45^\circ$                               D]  $15^\circ$
26. If sun's elevation is  $60^\circ$  then a pole of height 6 m will cast a shadow of length.  
A]  $6\sqrt{3}$  m                              B]  $\sqrt{3}$  m                              C]  $2\sqrt{3}$  m                              D]  $3\sqrt{2}$  m