Objective Type Questions

Q.1   Each questions has four possible answers. Choose the correct answer and encircle it.

___1.   Law of sines is:

(a) $\dfrac{a}{\sin B} = \dfrac{b}{\sin A} = \dfrac{c}{\sin c}$ (b) $\dfrac{a}{\sin A} = \dfrac{b}{\sin B} = \dfrac{c}{\sin C}$

(c) $\dfrac{a}{\sin B} = \dfrac{b}{\sin A} = \dfrac{c}{\sin C}$ (d) $\dfrac{a}{\sin B} = \dfrac{b}{\sin C} = \dfrac{a}{\sin A}$

___2.   In a triangle ABC $\angle A = 70^\circ$, $\angle B = 60^\circ$, then $\angle C$ is:

(a) 30° (b) 40° (c) 50° (d) 60°

___3.   When angle of elevation is viewed by an observer, the object is:

(a)   Above   (b)   Below

(c)   At the same level   (d)   None of these

___4.   If b = 2, A = 30°, B = 45°, then a is equal to:

(a)   2   (b) $\sqrt{2}$ (c) $\dfrac{\sqrt{3}}{2}$ (d) $\dfrac{2}{\sqrt{3}}$

___5.   If a = 2, b = 2, A = 30°, then B° is:

(a) 45° (b) 30° (c) 60° (d) 90°

___6.   If in a triangle ABC, the sides b, c and angle A are given, then the side a is:

(a) $a^2 = b^2 + c^2 + 2bc \cos A$ (b) $a^2 = b^2 - c^2 - 2ab \cos A$

(c) $a^2 = b^2 + c^2 - 2bc \cos A$ (d) $a^2 = b^2 - c^2 + 2ab \cos A$

___7.   In a triangle ABC, the law of cosine is:

(a) $\text{Cos A} = \dfrac{b^2 + c^2 + a^2}{2bc}$ (b) $\text{Cos A} = \dfrac{b^2 + c^2 - a^2}{2bc}$

(c) $\text{Cos A} = \dfrac{b^2 + c^2 + a^2}{2ab}$ (d) $\text{Cos A} = \dfrac{b^2 + c^2 - a^2}{2ac}$

___8.   If in a triangle ABC, b = 2, c = 2, A = 60°, then side a is:

(a)   2   (b)   3   (c)   4   (d)   5

___9.   If in a triangle ABC, a = 1, b = $\sqrt{2}$, C = 60°, then side c is:

(a) $\sqrt{2}$ (b)   2   (c)   1   (d)   3

___10.   If in a triangle ABC, b = 2, c = 3, a = 1, then cos A is:

(a)   1   (b)   2   (c)   3   (d)   4

___11.   If in a triangle ABC, a = 3, b = 4, c = 2, then cos C is:

(a) $\dfrac{1}{2}$ (b) $\dfrac{3}{4}$ (c) $\dfrac{7}{8}$ (d)   3

___12.   If b sin C = c sin B, then, a sin B is equal to:

(a) c sin A   (b) b sin c   (c) b sin A   (d) b sin B

__13.   In a right triangle if one angle is 30°, then the other will be:

(a)   45°   (b)   50°   (c)   60°   (d)   75°

__14.   In a right triangle if one angle is 45°, then the other will be:

(a)   45°   (b)   50°   (c)   60°   (d)   75°

__15.   If B = 90°, b = 2, A = 30°, then side a is:

(a)   4   (b)   3   (c)   2   (d)   1

__16.   If c = 90°, a = 1, c = 2, then angle A is:

(a)   90°   (b)   60°   (c)   45°   (d)   30°

__17.   If c = 90°, b = 1, c = $\sqrt{2}$, then side a is:

(a)   1   (b)   2   (c) $\sqrt{2}$ (d)   3

__18.   If c = 90°, b = 1, c = $\sqrt{2}$, then angle A is:

(a)   15°   (b)   30°   (c)   45°   (d)   60°

__19.   The distance of a man from the foot of a tower, 100m high if the angle of elevation of its top as observed by the man is 30° is:

(a)   50m   (b)   100m   (c)   150m   (d)   200m

__20.   A pilot at a distance of 50m, measure the angle of depression of a tower 30°, how far is the plane from the tower:

(a)   50m   (b)   25m   (c)   20m   (d)   10m

Answers

Q1:

1.	b	2.	c	3.	a	4.	d	5.	b
6.	c	7.	b	8.	a	9.	c	10.	a
11.	c	12.	c	13.	c	14.	a	15.	d
16.	d	17.	a	18.	c	19.	d	20.	b