

Unit 6 - Week 5

Course outline

How does an NPTEL online course work?

Week 1

Week 2

Week 3

Week 4

Week 5

Measurement of Distance

Measurement of Distance Using TS

Measurement of Horizontal Angle Using TS

Measurement of Vertical Angle and Height Using TS

Errors in Total Station

Quiz : Assessment 5

Week 6

Week 7

Week 8

Download Videos

Weekly Feedback

Assessment 5

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-04-01, 23:59 IST.

1) EDM technique that provides more accurate measurement of distance is

1 point

- Phase shift method
 Pulsed laser system

No, the answer is incorrect.
Score: 0

Accepted Answers:
Phase shift method

2) Precision in measurement of angle may be increased by making

1 point

- One direct measurement only
 One direct and one reverse measurement only
 Repetition in measurement

No, the answer is incorrect.
Score: 0

Accepted Answers:
Repetition in measurement

3) Total station measures

1 point

- Horizontal distance
 Vertical distance
 Slope distance

No, the answer is incorrect.
Score: 0

Accepted Answers:
Slope distance

4) In case of measurement of horizontal angle by total station in reverse mode, FS is taken to the object at the _____ of the observer

1 point

- Right
 Left
 Either of the right or the left

No, the answer is incorrect.
Score: 0

Accepted Answers:
Left

5) From direct mode to reverse mode of a total station can be achieved through

1 point

- Plunging and swinging of alidade
 Plunging and swinging of EDM
 Plunging of alidade and swinging of EDM
 Plunging of EDM and swinging of alidade

No, the answer is incorrect.
Score: 0

Accepted Answers:
Plunging of EDM and swinging of alidade

6) Which one of these is incorrect:

1 point

- Both pulse laser based method and phase shift method are used for reflector based measurements.
 Pulse laser based measurement has longer range than Phase shift measurement.
 Accuracy in Phase shift measurement is better than Pulse based measurement.
 For longer range, Pulse laser based measurement is faster than Phase shift measurement

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both pulse laser based method and phase shift method are used for reflector based measurements.

7) During measurement, the incident wave or pulse from total station to a reflector

1 point

- Should be exactly to the center of prism as the alignment of prism is critical.
 May be within a range of incidence of about 10° to the normal of the front face of the prism.
 May be within a range of incidence of about 20° to the normal of the front face of the prism
 May be within a range of incidence of about 30° to the normal of the front face of the prism.

No, the answer is incorrect.
Score: 0

Accepted Answers:
May be within a range of incidence of about 20° to the normal of the front face of the prism

8) Total station automatically measures

1 point

- Altitude Angles
 Horizontal Distance
 Vertical Heights
 Zenith Angles

No, the answer is incorrect.
Score: 0

Accepted Answers:
Zenith Angles

9) Error due to curvature and refraction is given by $0.0675 D^2$ where

1 point

- error is in metre and D is in kilometre
 error is in millimetre and D is in metre
 both error and D are in metre
 both error and D are in kilometre

No, the answer is incorrect.
Score: 0

Accepted Answers:
error is in metre and D is in kilometre

10) Temporary adjustment of a total station does not consist of

1 point

- Fixing
 Leveling
 Centering
 Orientation

No, the answer is incorrect.
Score: 0

Accepted Answers:
Orientation

11) Error in measurement in heights may be removed/reduced

1 point

- by placing total station near backsight station
 by placing total station near foresight station
 by placing total station between back sight station and foresight station
 by placing total station anywhere outside the line joining back sight station and foresight station

No, the answer is incorrect.
Score: 0

Accepted Answers:
by placing total station between back sight station and foresight station

12) Integer ambiguity is associated with measurement of

1 point

- Angle
 Horizontal distance
 Vertical distance
 Slope distance

No, the answer is incorrect.
Score: 0

Accepted Answers:
Slope distance

13) Error in height from total station may be reduced by placing total station

1 point

- near back sight station
 near fore sight station
 irrespective of the location of back sight and fore sight stations
 in between the back sight and fore sight stations

No, the answer is incorrect.
Score: 0

Accepted Answers:
in between the back sight and fore sight stations

14) Errors in measurements from total station may be reduced by taking

1 point

- measurements in direct mode
 measurements in reverse mode
 measurements either in direct or in reverse mode
 measurements both in direct and in reverse mode

No, the answer is incorrect.
Score: 0

Accepted Answers:
measurements both in direct and in reverse mode

15) _____ error is not due to lack in permanent adjustment of total station

1 point

- Vertical collimation
 Centering
 Tiltting axis
 Horizontal collimation

No, the answer is incorrect.
Score: 0

Accepted Answers:
Centering