

# **Bharati Vidyapeeth Institute Of Technology, Navi Mumbai**

## **Question Bank (K-Scheme)**

**Name of subject: Advanced Surveying**

**Subject code:**

**Unit Test: II**

**Course: CE**

**Semester: III**

### **CHAPTER 3 (Advanced Surveying Equipment)**

**(2 Marks)**

- a. State uses of Total Station.
- b. State any two features of digital theodolite.
- c. State Component parts of EDM.
- d. State Component parts of Micro Optic theodolite (Wild T-1).

**(4 Marks)**

- a. State the procedure of building Layout using total station.
- b. State the features of electronic theodolite.
- c. State the uses of total station.
- d. State the principle of EDM with sketch.
- e. State 4 component parts of digital theodolite & state their purpose.
- f. Explain the procedure of measurement of horizontal angle using Digital theodolite.
- g. Explain procedure of measuring distance using EDM.
- h. Write a note on Total Station and state its component parts.

### **CHAPTER 4 (Remote Sensing GPS & GIS)**

**(2 Marks)**

- a) State uses of GPS.
- b) State the object of remote sensing.
- c) Define GIS and its objectives.
- d) Enlist various GIS Software.

**(4 Marks)**

- a. Define active and passive systems.
- b. State various applications of GIS.

c. Define the following terms & give any 2 components of each:

(i) GIS

(ii) GPS

d. Explain the applications of remote sensing in the following area:

(i) Alignment of Highways and rail-lines

(ii) Tunneling

(iii) Environmental application

(iv) Location of Gravity Dam sites.

Differentiate between Active and Passive system of Remote Sensing

State applications of GIS.

e. Explain the applications of remote sensing in the following area:

- (i) Alignment of Highways and rail-lines
- (ii) Tunneling
- (iii) Environmental application
- (iv) Location of Gravity Dam sites.

f. Differentiate between Active and Passive system of Remote Sensing.

g. Define GPS and its basic components.

**CHAPTER 5 (Aerial Surveying and Photogrammetry)**

**(2 Marks)**

a) State principle of Aerial Surveying.

b) Define Photogrammetry.

c) Enlist the types of Drones.

d) Basic principle of Photogrammetry.

**(4 marks)**

a) State uses of Aerial Surveying.

b) Applications of Photogrammetry in Civil Engineering.

c) State methods of Aerial Surveying.

d) State characteristics of Aerial Photographs.

e) State merits and demerits of Photogrammetry Surveying.

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