

Higher Secondary (Vocational)
CLASS XII
Semester - IV
SURVEY OF CONSTRUCTION SITE

Full Marks: 30

A. Answer any 5 (five) questions

(5 * 2 = 10)

1. What is line of collimation?
2. What is profile levelling?
3. What is face left observation?
4. What are the conditions to be satisfied in a closed theodolite traverse?
5. Write two advantages of Total Station.
6. What are the various segments of GPS?
7. Write down two instruments which are used for setting out works.
8. What is J.L. number of a Mouza map?

B. Answer any 4 (four) questions

(5 * 4 = 20)

1. What is Bench Mark? Describe the 'Rise and Fall' method of computing the levels.
2+3=5
2. The following three readings related to a levelling operation from a single station. If the first reading was to a BM of RL 150 m , enter the readings in the field book format and find the RL of the last point. Use height of the instrument method. 1.720, 0.970, 2.120.
5
3. Explain the temporary adjustment of a Theodolite. 5
4. The length and bearing of lines of a triangle are given below. Find the latitudes and departures of the lines. 5

Line	Length(m)	Bearing(degree)
AB	52	60
BC	68	130
CA	98	280

5. What is Total Station? Briefly explain the field operation of Total Station. 2+3=5
6. What is the full form of GPS? What are the advantages and disadvantages of GPS? 5
7. What is the meaning of the term 'setting out' in construction? Explain the procedure of layout of a building with the help of Theodolite. 2+3=5