

Roll No. ....

Total No. of Questions : 09]

[Total No. of Pages : 02

**B.Tech. (Sem. - 3<sup>rd</sup>)**

**SURVEY - I**

**SUBJECT CODE : CE - 201**

**Paper ID : [A0601]**

[Note : Please fill subject code and paper ID on OMR]

**Time : 03 Hours**

**Maximum Marks : 60**

**Instruction to Candidates:**

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Two** questions from Section - C.

**Section - A**

**Q1)**

**(10 × 2 = 20)**

- a) What are different types of surveys?
- b) What is the procedure of selecting station points in chain surveying?
- c) Explain closing error in compass surveying?
- d) Name the equipments used for plane tabling.
- e) What are the types of adjustments needed in a level?
- f) What is meant by horizontal equivalent of a contour?
- g) Name different types of chains.
- h) Explain the function of leveling staff.
- i) What is the use of a Ceylone Ghat Tracer?
- j) What principle of chain surveying?

## Section - B

(4 × 5 = 20)

- Q2) How location of inaccessible points can be determined by ranging rods?
- Q3) Explain local attractions in compass surveying and their eliminations.
- Q4) How height of accessible and inaccessible objects can be measured?
- Q5) What are various methods for calculating the volume of earth work?
- Q6) Explain the term strength of fix in case of plane tabling.

## Section - C

(2 × 10 = 20)

- Q7) Explain three-point problem and stepwise procedure to solve it.
- Q8) Explain the procedure involved in setting out gradient for a road.
- Q9) Explain the use of following minor instruments:
- (a) Hand level.
  - (b) Tangent clinometer.
  - (c) Planimeter.

