

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (Sem.-6)

CONSTRUCTION EQUIPMENT AND AUTOMATION

Subject Code : PECE-604A-18

M.Code : 79406

Date of Examination : 09-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Why is equipment planning necessary?
- b) What are the methods of compacting concrete?
- c) Why Bulldozer is a versatile equipment?
- d) List various types of rollers used to compact asphalt paving mixes.
- e) List advantages of reciprocating pumps.
- f) List factors that must be considered while selecting pumps for construction applications.
- g) List various types of concrete mixers.
- h) What are the advantages of a drum mix plant over batch mix plant?
- i) Which sensor is used for monitoring the structural health of building and bridges?
- j) What is the full form of DRONE?

SECTION-B

2. Discuss significance of equipments in construction industry.
3. Discuss the advantages and disadvantages of a scraper.
4. Enlist various hoisting equipments. Discuss tower cranes briefly.
5. Draw neat sketches of different component of Concrete Batching plant.
6. What are the advantages and disadvantages of Automation?

SECTION-C

7. List advantages and disadvantages of single acting and double acting hammer to drive piles.
8. Explain various components of a batch mix plant alongwith a neat sketch.
9. Explain in detail the uses of robots in construction industry. What are basics of Robotics?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.