

GUJARAT TECHNOLOGICAL UNIVERSITY
ME – SEMESTER – III (New) • EXAMINATION – WINTER - 2020

Subject Code: 3731409**Date: 02/1/2021****Subject Name: Construction Equipment and Management****Time: 10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss the contribution and importance of construction equipment's in Construction industry. **07**
(b) What is meant by depreciation? Drive the expression for depreciation and book value. **07**
- Q.2** (a) List and explain classification of construction equipment based its purpose. **07**
(b) What meant by Rolling resistance of the haul road? What are the factors affecting the rolling resistance. **07**
- Q.3** (a) Discuss the effect of pressure and temperature on the performance of I.C Engines. **07**
(b) What are the functions of a tractors? What are the various types of tractors. **07**
- Q.4** (a) Differentiate between standard equipment and special equipment. **07**
(b) What are the uses of scrapers? Classify the scrapers and explain in brief. **07**
- Q.5** (a) What is pile foundation? Explain different type of piles based on function. **07**
(b) Enlist the various factors affecting equipment selection. Explain about equipment replacement policy. **07**
- Q.6** (a) Explain the method of construction of under reamed piles with help of neat sketch. **07**
(b) What is 'economic life' of equipment? Discuss factors affects to be considered to to decide it? **07**
- Q.7** (a) What is power shovel? Explain operation of power shovel. **07**
(b) Explain sinking fund method for calculation of depreciation in detail? **07**
- Q.8** (a) Discuss advantages and disadvantages of Draglines and Clamshells. **07**
(b) Discuss basic parts and operation of screw conveyors with neat sketches. **07**
