

FACULTY OF ENGINEERING

B.E. 2/4 (Civil) II Semester (Main) Examination, May/June 2011

MECHANICAL TECHNOLOGY (PART – B)

Time : 1½ Hours]

[Max. Marks : 37

Note : Answer all questions from Part – A. Answer any **three** questions from Part – B.

PART – A

(Marks : 13)

1. Differentiate between a cable excavator and bucket wheel excavator. 3
2. What are the applications of an aerial ropeway ? 2
3. State usage of concrete vibrator in construction engineering. 3
4. Write applications of fork lift truck. 2
5. Sketch the cross-section of jack hammer. 3

PART – B

(Marks : 3 × 8 = 24)

6. (a) Explain the working and operation of drag line. 4
 (b) Discuss the operation and applications of cable excavator with a neat sketch. 4
7. What are the different types of conveyors ? Explain the operation of a belt conveyor with a neat sketch. 8
8. (a) What are the types of crushers ? Explain the gyratory crusher with a neat sketch. 4
 (b) Describe the operation of a concrete pump and write its applications. 4
9. (a) Explain the working principle of reciprocating air-compressor and give applications. 4
 (b) Explain the tilting type of concrete mixer and compare it with mobile mixers. 4
10. Differentiate between swing and non-swing mobile cranes. 8