

Hall Ticket Number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Code No. : 13110 MT

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CBCS) III-Semester Main Examinations, December-2017

Mechanical Technology

Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

1. List the advantages of utilizing the Construction equipment.
2. Write the applications of Bulldozers and Graders.
3. List the advantages of conveying equipment.
4. Differentiate between Apron conveyor and Bucket conveyor.
5. Identify which hoisting equipment is capable of providing three-dimensional movement of a load in one virtually continuous operation and mention its advantages.
6. Write the applications of Cranes.
7. Describe Screen efficiency.
8. Distinguish between vibrating and stationary screens.
9. Enlist the applications of Pneumatic tools.
10. State usage of Concrete vibrator in construction engineering.

Part-B (5 × 10 = 50 Marks)

11. a) Write the comparison between Crawler and wheeled tractors. [5]
b) Describe the parts of a Scraper and write the various operations involved in the production cycle of a Scraper. [5]
12. a) Explain the operation of Belt conveyor with a neat sketch and mention their applications. [6]
b) Write the applications and advantages of Aerial ropeway. [4]
13. a) Mention the different types of hand operated Chain hoists and explain any one chain hoists with a neat sketch. [5]
b) Explain Whirler crane. [3]
14. a) List the different types of crushers and explain any one crusher with neat sketch. [7]
b) Write the advantages of concrete pump. [3]
15. a) Explain, with a neat sketch, the operation of Concrete vibrator. [4]
b) Explain any one pneumatic equipment with neat sketch. [6]
16. a) Describe a Basic shovel and show how it can be converted into different mechanisms. [6]
b) Explain the Screw conveyor with neat sketch. [4]
17. Write short notes on any *two* of the following:
a) Derrick cranes. [5]
b) Concrete mixers. [5]
c) Reciprocating air compressor. [5]

CCCCCCCC