

**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

June, 2017

00653

**BME-055 : COMPUTER INTEGRATED
MANUFACTURING**

Time : 2 hours

Maximum Marks : 70

***Note :** Answer any **seven** questions. All questions carry equal marks.*

1. With a neat diagram, describe the concept of Computer Integrated Manufacturing (CIM). Discuss the scope of CIM in modern factories. 10
2. What is CAD ? Differentiate between CAD and CAM. What are the benefits of CAD and CAM ? 10
3. Describe how electronic data transfer takes place from a manufacturer to various suppliers. 10
4. Describe the components of FMS. Write the advantages of FMS over conventional manufacturing system. 10

5. Discuss the applications of Robots in an automotive company. 10
6. What is CMM ? With a neat sketch, explain the mechanical structure of CMM. 10
7. (a) What is Computer Aided Process Planning? 10
(b) Explain Material Requirement Planning. 5+5
8. (a) What is Inspection ? How is it different from Testing? 10
(b) With a suitable example, differentiate between off-line inspection and on-line inspection. 5+5
9. Write short notes on any *two* of the following : 5+5
(a) Just-In-Time
(b) AS/RS
(c) AGV
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