

01503

**DIPLOMA IN MECHANICAL ENGINEERING  
(DME)**

**Term-End Examination**

**December, 2012**

**BME-063 : CAD / CAM**

*Time : 2 Hours*

*Maximum Marks : 70*

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

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1. (a) What are the requirements needed for Display/Visualization of model in CAD/CAM systems ? 7
- (b) What are the various applications of CAD and CAM ? Explain briefly. 7
2. (a) What do you mean by Random Scan Technique ? Explain with suitable figures. 7
- (b) Explain principle and working of Liquid Crystal display. 7
3. (a) Explain, extrude sweep and revolve commands which are used in CAD modelling with suitable examples. 7
- (b) Why are the CAD/CAM data exchange standards are required ? Explain. 7

4. (a) What are the different solid modelling operation ? Explain with examples. 7
- (b) What are the different types of Geometric modelling ? Explain them. 7
5. (a) Explain the basic co-ordinate system used in CNC. 7
- (b) What are the different components of Computer Aided manufacturing system ? Explain. 7
6. (a) What are the different components in FMS ? Explain them. 7
- (b) Explain the different types of FMS Layouts. 7
7. (a) Explain the following : 7
- (i) MRP-II (ii) JIT (iii) ERP
- (b) Explain the Management Information System (MIS) with suitable examples. 7
8. (a) Explain the different Decision-Support Systems. (DSS) 7
- (b) Write short notes of the following :  $3\frac{1}{2} \times 2 = 7$
- (i) Robot Anatomy
- (ii) Parameters Defining Robots.