

**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

December, 2014

00845

BME-063 : CAD / CAM

Time : 2 hours

Maximum Marks : 70

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

1. (a) Explain the design process for CAD system with suitable block diagram. 7
(b) Differentiate wire frame modelling with solid modelling, giving suitable examples. 7
2. (a) How can the flickering of the image on the CRT monitor be avoided ? Discuss in brief. 7
(b) What are the limitations of light pen as a locating device ? 7
3. (a) What are the different types of output devices ? Explain the function of any two output devices with neat sketches. 7
(b) What are the types of co-ordinate systems ? Explain with suitable examples. 7

4. (a) Write the functions of geometric modelling in various functional areas. Explain in brief. 7
- (b) How has the model been developed by extrusion feature ? Explain with a suitable sketch. 7
5. (a) What are the advantages and disadvantages of computer aided manufacturing over the conventional manufacturing ? 7
- (b) Explain the operation of CNC-Machine tool system with a neat sketch. 7
6. (a) Write a descriptive note on “Basic Robot Motions”. How are these motions provided to a robot ? 7
- (b) What is Management Information System (MIS) ? Explain the concept of MIS with a suitable sketch. 7
7. (a) Differentiate between open loop system and closed loop system with suitable examples. 7
- (b) What are the recent trends in manufacturing ? Describe them in detail. 7
8. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Simulation
- (b) Decision Support System (DSS)
- (c) CAD/CAM Database
- (d) AGVs