BME-063

DIPLOMA IN MECHANICAL ENGINEERING (DME)

00040

Term-End Examination

June, 2013

BME-063 : CAD / CAM

Time : 2 Hours *Maximum Marks : 70*

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

1. (a) What is Geometric Modeling ? Explain a typical CAD model with suitable block diagram. 7

   (b) What are the requirements needed for Display/Visualization of Model in CAD/CAM systems ? 7

2. (a) What are the basic techniques for generation of graphic image ? Explain with suitable examples. 7

   (b) What do you mean by Raster Scan technique ? Explain with the help of figures. 7

3. (a) Why are the CAD/CAM data exchange standards required ? Explain. 7

   (b) What are the different input devices used in CAD system ? Explain. 7

4. (a) What are the basic components of CAM ?   7
Explain implementation of typical CAM
process on a CAD/CAM system with
suitable block diagram.

   (b) What are the different solid modeling   7
operation ? Explain with examples.

5. (a) What are the types of co-ordinate system   7
used in CNC machine tools ? Explain with
suitable examples.

   (b) Explain the basic co-ordinate system used   7
in CNC systems.

6. (a) What is Servo Machanism ? Explain   7
working of Servo Mechanism in CNC
machine with suitable sketch.

   (b) Explain the different types of FMS Layouts.   7

7. (a) Why MIS is required in the industry ? Also   7
Explain it.

   (b) What are the advantages and disadvantages   7
of CNC machines ?

8. (a) What are the components and applications   7
of DSS ?

   (b) What are the different parameters defining   7
Robots ? Explain.

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