Full Marks : 70

Time : 3 hours

Answer any **six** questions including **Q. No. 1**

The figures in the right-hand margin indicate marks

1. Answer the following questions :   2 × 10

   (a) What are the benefits for implemening CIM ?

   (b) Explain the role of cellular manufacturing.

   (c) What are the benefits of DNC ?

   (d) Why machining centers are preferable ?

   (e) List the benefits of FMS.

   (f) What do you mean by AGV ?

   (g) Explain OPTIZ coding system.

   (h) What do you mean by Architecture of data base ?

(*Turn Over*)

(i) Explain about the manufacturing enterprise wheel.

(j) What are the different process planning systems are available ?

2. (a) Describe the FMS layout configurations. How do you select material handling equipment for them ? 5

(b) What is group technology ? How are parts grouped into families ? 5

3. Explain the methods of parts classification and coding. 10

4. What are the different factors that should be considered in selecting a suitable classification -and-coding system ? 10

5. What is computer aided process planning ? Explain the approaches used for computer aided process planning systems. 10

6. Explain the variant and generative computer aided process planning systems. 10

7. (a) Explain briefly about MAP/TOP. 5

(b) How AI techniques can be applied to computer aided process planning systems ? 5

8. (a) What are the softwares to be applied to CIM ? Explain briefly. 5

(b) How the communication fundaments are helpful for data communication ? 5

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