M. TECH.-I (MECHANICAL CAD/CAM) (CBCS – 2015 COURSE) : WINTER - 2017

SUBJECT: COMPUTER INTEGRATED MANUFACTURING

Day: **Friday** Time: **11.00 AM TO 02.00 PM**

Date: ***19/01/2018*** **W-2017-2790** Max. Marks: 60

N.B.:

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in **SEPARATE** answer books.

SECTION-I

Q.1 Explain in details the nature and the role of the elements of CIM. **(10)**

OR

Describe the changing manufacturing and management scenario after the development of CIM. **(10)**

Q.2 Discuss the concept of low cost automation in improving productivity in small and medium industries. **(10)**

OR

Discuss the need for flexibility in automated manufacturing systems. What are the limitations of the same? **(10)**

Q.3 What is DNC? Compare DNC with BTR configuration and DNC with specialized MCU. **(10)**

OR

Explain the automatic identification technologies used in CIM. **(10)**

SECTION-II

Q.4 Discuss the integration of CAD database and CIM operations. **(10)**

OR

Explain the working principle of computer vision system. **(10)**

Q.5 Explain the retrieval and generative type of computer aided process planning. **(10)**

OR

Explain the role and architectures of manufacturing resource planning in CIM. **(10)**

Q.6 Compare the features of sequence controllers and programmable controllers. **(10)**

OR

Explain the linear feedback control system. **(10)**