Total No. of Questions : 8]

SEAT No. :

**P5009**

[Total No. of Pages : 2

# [4960]-653

## M.E. (Mechanical) (CADME)

## COMPUTER AIDED MANUFACTURING

## (2012 Pattern) (Semester - II)

*Time : 3 Hours]* *[Max. Marks : 100*

***Instructions to the candidates:***

1) ***Answer any three questions from each section.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if necessary.***

## SECTION - I

***Q1)*** a) Explain different levels of automation in details? **[9]**

b) Discuss basic components of NC - System with sketches? **[9]**

***Q2)*** Explain different NC motion controls in details? Elabrate NC coding systems. **[16]**

***Q3)*** What computer numerical control? Explain elements of CNC machines with neat sketches. Enlist features of CNC system over NC System? **[16]**

***Q4)*** Define direct Numerical Control. Explain distributed Numerical Control in detail. Compare CNC and DNC? **[16]**

## SECTION - II

***Q5)*** What is graph technology? Explain different part families and part classification with coading in details. Enlist advantages. **[18]**

***P.T.O.***

***Q6)*** a) Define flexible manufacturing system. Explain elements of FMS. **[8]**

b) Discuss concept of first in time manufacturing. **[8]**

***Q7)*** a) Discuss in detail computer integrated manufacturing. **[8]**

b) Elabrate the concept of Engineering Resource Planning. **[8]**

***Q8)*** a) What is product data management. How it is better than engineering data management. **[8]**

b) Discuss the concept product life cycle management in detail. **[8]**