

University Institute of Engineering & Technology

(Recognised Under Section 2(f) and 12B of UGC)

Kurukshetra University, Kurukshetra

THEORY EXAMINATION – JULY 2021	
B.TECH - ME	SEMESTER – VI

TIME – 4 Hrs.

M.M. - 75

PAPER - ME-308

SUBJECT- COMPUTER AIDED DESIGN & MANUFACTURING

INSTRUCTIONS TO BE FOLLOWED

- The candidates will be required to attempt All questions in Part-A and Part-B (Compulsory Sections). Attempt any four questions from Part-C selecting at least one from each unit.
- Allotted time for examination is 4 hours that includes time for downloading the question paper, writing answers, scanning of answer sheets and uploading the sheets on the Attendance Sheet Cum Answer Sheet Uploading google form.
- The PDF files should be saved as Roll No. and Subject Code.
- Maximum Page Limit should be 36 (Thirty Six) for attempting the question paper on A4 sheets which could be downloaded and printed from the sample sheets given in the UIET Website.
- Over-attemptation should be avoided.
- Handwriting should be neat and clean and diagrams should be clear and contrasted.
- The candidate should not write their Mobile No. otherwise Unfair Means Case will be made.
- While attempting the paper, the candidate will use blue/black pen only.
- Before attempting the paper, the candidate will ensure that he/she has downloaded the correct question paper. No complaint for attempting wrong question paper by the candidate will be entertained.
- Candidate must ensure that he/she has put his/her signature on each page of the answer sheet used by him/her. Answer sheet without the signature of the candidate will not be evaluated.
- Attempt parts A, B & C separately. Do not inter-mix them. Write neatly & mention the question number clearly.

PART-A (15 Marks)

Q. No. – 1 Answer the following questions.

15x1=15

(i)	Define CAD & CAM.
(ii)	Write two display devices used in CAD.
(iii)	What is the difference between CIM and CAD & M.
(iv)	How CAD database is useful for Quality inspection?
(v)	Differentiate between B Rep and C Rep.
(vi)	Define ruled surface.
(vii)	Define IGES.
(viii)	What is geometric modelling?
(ix)	Difference between 2D and 3D.
(x)	What are the various 2D transformations?
(xi)	Define homogeneous coordinate.
(xii)	Explain machine cell.
(xiii)	What do you mean by distributed NC?
(xiv)	What is the difference between Numerical control and Adaptive control?
(xv)	Define flexibility in FMS.

PART-B (20 Marks)

UNIT-I		
2	Explain photogrammetry in details.	5
UNIT-II		
3	What is geometric modelling also differentiate between wireframe modelling and surface Modelling?	5
UNIT-III		
4	Differentiate between translation and panning.	5
UNIT-IV		
5	Define MCU in CNC.	5

PART-C (40 Marks)

UNIT-I		
6	What do you understand by the term CIM? State and elaborate on the advantages of CIM In a manufacturing unit.	10
7	Describe any two methods of non contact type of computer aided testing.	10
UNIT-II		
8	Explain about Hermit cubic spline with neat sketch.	10

9	Explain B- spline surface with a neat figure and state the advantages of this surface.	10
UNIT-III		
10	Explain 2D transformation matrix for translation, rotation and scaling with a neat diagram	10
11	What are the various classifications of group technology?	10
UNIT-IV		
12	Discuss the CNC & manual part programming.	10
13	How the information flow takes place in a retrieval type computer aided process planning System.	10