KUMARAGURU college of technology
character is life

Register Number:……..….

M.E DEGREE EXAMINATIONS: JAN 2015

(Regulation 2014)

First Semester

CAD/CAM

P14CCTE14: Computer Aided Process Planning

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The set of preparing a detail work instruction to produce a part is known as [K_1]

   a) Process plan b) Production plan

   c) Material plan d) Route

2. Identify the representation of this symbol  [K_1]

   a) Surface roughness b) Run out

   c) Profile of surface d) Flatness

3. Match list I with list II and select the correct answer given below [K_1]

List I	List II
A. Input	1.Color
B. Auxiliary information	2.Disk
C. Topology	3.Edges
D. Output	4. Tablet

   a) 1-2-3-4 b) 4-1-3-2

   c) 4-3-1-2 d) 2-1-3-4

4. In MICLASS coding system 11&12th digit indicates [K_1]

   a) shape element b) Main shape

   c) Material code d) dimension ratio

5. Two rules have the same action and their condition sets overlap is known as [K_1]

a) Redundancy b) Completeness

c) Consistency d) Loop

6. Assertion(A):Generative process planning system has Knowledge base which stores manufacturing data. [K_1]

Reason(R): The user can modify the knowledge base in order to suit the particular system.

a) A is true but R is false b) Both A and R are true

c) R is true but A is false d) Both A and R are false

7. V is the original co-ordinate system, transformed to some other point V' and T is the distance, then new system [K_1]

a) V'= V.T b) V'= V/T

c) V'= V+T d) V'= V-T

8. Consider the production stage in variant process planning. Select the correct sequence [K_1]

1. Coding 2. Editing 3.Standard Plan Retrieval 4. Family search

a) 1-2-3-4 b) 1-3-4-2

c) 1-4-3-2 d) 2-4-3-1

9. Consider the following statement. Which of these statements are correct? [K_1]

1. Process optimization aims for minimum cost and maximum production rate.
2. Graphical planning aid involves tooling layout only.
3. Decision table and decision tress are the tools for decision making.
4. APPAS represents Automated Production Planning and Selection.

a) 1,3 b) 2,3

c) 3,4 d) 2,4

10. Production flow analysis is used for [K_1]

a) Family formation b) Data base structure

c) Plan editing d) Search algorithm

PART B (10 x 2 = 20 Marks)

11.	Group technology improves productivity-Justify.	[K_5]
12.	Compare production planning and process planning.	[K_3]
13.	List out the basic rules to be observed before dimensioning.	[K_1]
14.	Discuss about the mixed entry decision table.	[K_2]
15.	Differentiate experienced and variant process planning.	[K_2]
16.	Identify the modulus of AUTOPLAN.	[K_4]
17.	Discuss the factors to be considered for implementing the process planning.	[K_2]
18.	Explain about process knowledge data in TIPPS.	[K_2]
19.	Define the term topology.	[K_1]
20.	Explain the report generation in process planning system.	[K_2]

PART C (10 x 5 = 50 Marks)

21.	Demonstrate the production flow analysis with suitable example.	[K_2]
22.	Explain the concept of concurrent engineering.	[K_2]
23.	Analyze the basic steps in process planning with suitable sketch.	[K_4]
24.	Demonstrate the OPTIZ coding system with example.	[K_2]
25.	Discuss the elements needed for process capability analysis.	[K_2]
26.	Compare forward and backward process planning with suitable example.	[K_3]
27.	Discuss about Computerized Production Process Planning.	[K_2]
28.	Identify the factors to be considered in Implementation of CAPP system.	[K_2]
29.	Explain about the Modular structure in TIPPS	[K_2]
30.	Discuss the logical steps involved in TIPPS operation.	[K_2]

PART D (2 x 10 = 20 Marks)

31. Examine the graphic representation scheme in geometric modeling for process planning. [K_4]

32. Explain the Data Structure in Totally Integrated Process Planning System. [K_2]

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