Program: BE Mechanical Engineering

Curriculum Scheme: Revised 2016

Examination: Fourth Year Semester VII

Course Code MEC702 and Course name CAD/CAM/CAE

Time: 1 Hour Max. Marks: 50

Note to the students: All the questions are compulsory and carry equal Marks.

Q1	**A three-dimensional object can also be represented using one of the following**
Option A:	Method
Option B:	Equation
Option C:	Point
Option D:	Line
Q2	**Which vertex of the polygon is clipped first in polygon clipping?**
Option A:	Top right
Option B:	Bottom right
Option C:	Bottom left
Option D:	Top left
Q3	**We translate a two-dimensional point by adding**
Option A:	Translation distances
Option B:	Translation difference
Option C:	A and B
Option D:	Only a
Q4	**The best hidden surface removal method used for complex scenes with more than a few thousand surfaces is ?**
Option A:	depth sorting method
Option B:	depth buffer algorithm
Option C:	octree method
Option D:	depth buffer algorithm & octree method
Q5	**The point at which a set of projected parallel lines appear to coverage is called as a ?**
Option A:	convergence point
Option B:	vanishing point
Option C:	point of illusion
Option D:	point of delusion
Q6	**All the hidden surface algorithms employe image space approach except ?**
Option A:	Back face removal
Option B:	Depth buffer method
Option C:	Scan line method
Option D:	Depth sort method
Q7	**What is Artificial intelligence?**
Option A:	Putting your intelligence into Computer
Option B:	Programming with your own intelligence

Option C:	Making a Machine intelligent
Option D:	Playing a Game
Q8	**Which of the following is an application of AI?**
Option A:	Windowing
Option B:	Expert Systems
Option C:	Shifting
Option D:	Storages
Q9	**If the value of sx=2 and sy=1 then**
Option A:	Reduce the size of object
Option B:	Distort the picture
Option C:	Produce an enlargement
Option D:	No change in the size of an object
Q10	**For 2D transformation the value of third coordinate i.e. w=?**
Option A:	1
Option B:	-1
Option C:	0
Option D:	2
Q11	**Which of the following refer to the shapes created by union, intersection and difference of given shapes.**
Option A:	Wire frame model
Option B:	Composite transformation
Option C:	Constructive solid geometry methods
Option D:	Solid model
Q12	**We translate a two-dimensional point by adding**
Option A:	Translation distances
Option B:	Translation difference
Option C:	X and Y
Option D:	Only a
Q13	**Which of the following code is used to select y-z plane in milling?**
Option A:	G32
Option B:	G00
Option C:	G02
Option D:	G19
Q14	**_____ cycle is used in CNC part programing for repeated operation.**
Option A:	Replay
Option B:	Carnot
Option C:	Canned
Option D:	Logic
Q15	**NC countering is an example of**
Option A:	Pint to point positioning
Option B:	Continuous path position
Option C:	Absolute positioning
Option D:	Incremental positioning
Q16	**Identify the appropriate term from following for Numerical control**
Option A:	Applies only to milling machines
Option B:	Is a method for producing exact number of parts per hour

Option C:	Is a method for controlling by means of set of instructions
Option D:	Is a method to set the instructions to the computer
Q17	**The device, fed to the control unit of NC machine tool which sends the position command signals to side way transmission elements of the machine, is called as**
Option A:	Controller
Option B:	Feedback
Option C:	Tape
Option D:	Servomotor
Q18	**The applications of the Finite Element Method in two-dimensional analyses are _____.**
Option A:	Stretching of Plates
Option B:	Gravity of Dams
Option C:	Axisymmetric Shells
Option D:	Stress Analysis
Q19	**Finite element analysis deals with**
Option A:	Approximate numerical solution
Option B:	Non-Boundary Values Problems
Option C:	Partial Differential Equations
Option D:	Laplace Equations
Q20	**To find the nodal displacement in all parts of the element _____ are used**
Option A:	Shape Function
Option B:	Node Function
Option C:	Element Function
Option D:	Coordinate Function
Q21	**The basic benefits of CAD systems include**
Option A:	Creation of Manufacturing database
Option B:	Increased use of resources
Option C:	Improper documentation
Option D:	Increase in inspection procedure
Q22	**The computerised technology that is used to design parts is known as**
Option A:	CAD
Option B:	CAM
Option C:	CIM
Option D:	CAE
Q23	**Of all of the current material addition rapid prototyping technologies, which one is the most widely used?**
Option A:	Ballistic particle manufacturing
Option B:	Selective laser sintering
Option C:	Solid ground curing
Option D:	Stereolithography
Q24	**Which of the following are problems with the current rapid prototyping and additive manufacturing technologies?**
Option A:	Limited material variety
Option B:	Inability to convert a solid part into layers
Option C:	Poor machinability of the starting material
Option D:	The inability of the designer to design the part

Q25	**Which of the following is used as base material in Selective laser sintering (SLS)?**
Option A:	Photopolymer
Option B:	Thermoplastics, Metal powders
Option C:	Titanium alloys
Option D:	Various materials