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Question Paper Code: 55P19

M.E.DEGREE EXAMINATION, DEC 2020

Third Semester

CAD / CAM

15PCD302 – ADDITIVE MANUFACTURING

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. Input of RP data is _____. CO1-U
(a) CAM data (b) CAPP data (c) CAD data (d) All of the above
2. Which of the following is not subtractive process? CO1- R
(a) Milling (b) Stereo-lithography (c) Sawing (d) EDM
3. Which file format cannot be converted into STL file format CO2-U
(a) .prt (b) .sld (c) .dwg (d) .stp
4. STL files contains _____. CO2-U
(a) mass properties of the model
(b) geometrical data
(c) drawing data
(d) all of the above
5. In 4D printing, which one is the fourth dimension CO3-U
(a) Time (b) Material
(c) Sound (d) Light
6. Which material gives finest surface finish in RP? CO3-R
(a) ABS (b) PLA
(c) Nylon (d) INF

7. Direct Shell Production Casting is _____. CO4-U
- (a) liquid-based RP systems
 (b) plasma-based RP system
 (c) powder-Based RP systems
 (d) solid-based RP systems
8. Which of the following is not an example of additive manufacturing? CO4-U
- (a) Fused-deposition-modeling.
 (b) Electron beam machining
 (c) SLS
 (d) Injection molding
9. STL file format is represented by interaction of _____. CO5-U
- (a) lines and hexagons (b) lines and rectangles
 (c) lines and triangles (d) lines and circles
10. In the entire reverse engineering process for product design, which one is the first step? CO5-U
- (a) CAD model updating (b) CAD modeling
 (c) Data pre-processing (d) Data capturing

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Write a note on the impact of AM on product development CO1- U (8)
12. Explain about data formats and data interfacing. CO2-U (8)
13. Explain the working principle of SLA. CO3- U (8)
14. What is LENS? Explain the same. CO4- U (8)
15. Explain the working principle of 3DP. CO5- U (8)