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Question Paper Code: 53P11

M.E.DEGREE EXAMINATION,DEC 2020

Third Semester

CAD / CAM

15PCD301 – COMPETITIVE MANUFACTURING SYSTEMS

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The following is (are) the advantage(s) of Cellular manufacturing. CO1-U
(a) Very little in-process inventory (b) More job satisfaction
(c) Reduced flow times (d) All of the above
2. The following type of Layout caters to 'intermittent flow' type of production. CO1- R
(a) Process layout (b) Product layout (c) Combined layout (d) All of the above
3. Cellular manufacturing is also known as CO2-U
(a) Manufacturing Technology. (b) Production Technology
(c) Group Technology. (d) None of the above
4. The following cell formation technique is based on Component shape and design? CO2-U
(a) Production flow analysis (b) Component flow analysis
(c) Composite component (d) Simulation
5. _____ line is used for large products. CO3-U
(a) Modular assembly (b) Flexible assembly
(c) Multi assembly (d) Custom assembly

6. DFMA Guidelines recommended the following; CO3-R
- (a) Avoid using separate fasteners (b) Minimize handling
(c) Maximize compatibility (d) All of these
7. Characteristic of lean production include: CO4-U
- (a) Improved production scheduling – production is initiated by customer demand rather than ability and capacity to product, i.e. production is demand-pull, not supply-push
(b) Small batch production or continuous production – production is based on customer demand resulting in highly flexible and responsive processes
(c) Continuous improvement, Zero inventory (JIT), Zero waiting time.
(d) All of the above
8. Identify the core methods of lean manufacturing: CO4-U
- (a) Just in time (JIT), Kaizen, 5S practice
(b) Total productive maintenance (TPM), Cellular manufacturing, six-sigma
(c) Both A&B
(d) None of the above
9. Just-in-Time was successfully implemented by CO5-U
- (a) Toyota (b) Honda (c) Suzuki (d) Volkswagen
- 10 In Just-In-Time system CO5-U
- (a) There is no delay (b) Conveyance times are balanced
(c) Both (A) and (B) (d) There is unequal production at different places

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain the types of control systems in detail. CO1- U (8)
12. Explain the N product scheduling and apply the concept with suitable example CO2-U (8)
13. Elaborate the various types of FMS software modules. CO3- U (8)
14. What is Hoshin Planning and explain the hoshin planning system in detail. CO4- U (8)
15. Explain the preventive maintenance technique in a production system CO5- U (8)