Reg. No. : ☐☐☐☐☐☐☐☐☐☐

Question Paper Code: 52131

M.E.DEGREE EXAMINATION, NOV 2016

Third Semester

CAD / CAM

15PCD301 – COMPETITIVE MANUFACTURING SYSTEMS

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

(5 x 20 = 100 Marks)

1. (a) (i) Explain hard automation and soft automation in detail.   (10)

        (ii) Write short notes on (a) PLC and (b) TPM.   (10)

                                    Or

    (b) (i) What is assembly and automated assembly.   (5)

        (ii) Explain the methods and system of assembly in detail.   (15)

2. (a) Explain the single product scheduling and apply the concept with suitable example. (20)

                                    Or

    (b) (i) Explain the types of machine cell and cell layouts.   (15)

        (ii) What are the benefits of machine cell design.   (5)

3. (a) (i) Describe system issues consideration while designing for FMS.   (10)

        (ii) Describe the method of applying simulation while designing for FMS.   (10)

                                    Or

    (b) Explain the simulation modeling process in detail.   (20)

4. (a) (i) Explain the standards in lean system. (5)

   (ii) Explain the 5S system in detail. (15)

Or

   (b) What are the four phases of Hoshin Planning explain it in detail. (20)

5. (a) (i) Enumerate the Quality and Quantity principles of JIT. (10)

   (ii) Discuss in detail about the push Vs pull System. (10)

Or

   (b) (i) Describe the method of achieving 'Small Lot Size' in lean manufacturing. (10)

   (ii) Write short notes on flexible work force in lean manufacturing. (10)

————————————

52131