Q.27 Write a part program for turning of a 20mm diameter aluminium rod. (CO3)

Q.28 Show the constructional details of plain milling cutter with diagram. (CO5)

Q.29 Explain any five milling operations. (CO5)

Q.30 Write a program for to cut a slot through the centre line of on a 50mmx50mm square plate using CNC milling machine. (CO3)

Q.31 Give the five applications of Laser Beam Machining. (CO1)

Q.32 Describe the working principle of Electrical Discharge Machining. (CO1)

Q.33 Compare ECM with EDM. (CO1)

Q.34 Explain any two work holding devices in milling. (CO5)

Q.35 Describe basic configuration of robot. (CO4)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain the working principle of Ultrasonic machining process. Give its advantages and limitations also.(CO2)

Q.37 Give The Constructional Details of CNC machine and explain its working. (CO2)

Q.38 Explain the construction and working of horizontal milling machine. (CO5)

No. of Printed Pages : 4 180354/170354
Roll No. .....

5th Sem./Automobile Engineering

Subject:- Advanced Manufacturing Processses

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 What is the full form of CNC? (CO2)

a) Computer numerical control
b) Computer number control
c) Computer network control
d) Computer numbers count

Q.2 The punch tape reader in a NC machine is._____(CO2)

a) feedback system b) input device
c) program d) driving system

Q.3 Which is not the type of part programming format? (CO3)

a) Fixed block format
b) Variable block format
c) Tab sequential format
d) Word address format

Q.4 Which of the following code is used to specify the spindle stop? (CO3)

a) M02 b) M03
c) M04 d) M05

Q.5 Cutting T-slots can be performed more effectively by_____milling machine. (CO5)

a) Horizontal
b) vertical
c) can't say anything
d) none of the mentioned

Q.6 The cutting edges are spaced_____ on the circumference of the milling cutter. (CO5)

a) Equally
b) Unequally
c) Can't say anything
d) None of the mentioned

Q.7 During USM, which of the following vibrates at ultrasonic frequency? (CO1)

a) Slurry mix
b) Workpiece
c) Tool
d) Abrasive particles only

Q.8 Which of the following are the applications of EBM process? (CO1)

a) Drilling b) Cutting
c) Engraving d) All of the mentioned

Q.9 Which one of the following robotic joints comes under translational motion? (CO4)

a) Orthogonal Joint b) Rotational Joint
c) Twisting Joint d) None of the above

Q.10 Full form of MCU is. (CO2)

a) Machine computer unit
b) Machine control unit
c) Machine control universal
d) Machine computer universal

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define NC tool. (CO2)

Q.12 Give an advantage of feedback system. (CO2)

Q.13 Expanded form of DNC is_____. (CO2)

Q.14 Write the purpose of tool offset. (CO3)

Q.15 Write the G code for dwell. (CO3)

Q.16 Name a work holding device in milling. (CO5)

Q.17 Define upmilling. (CO5)

Q.18 Write expanded form of EBM. (CO1)

Q.19 State the principle of Laser Beam Machining. (CO1)

Q.20 Define robotics. (CO4)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Describe the primary motions of robots. (CO4)

Q.22 Draw a labelled layout diagram of an NC machine(CO2)

Q.23 Compare absolute coordinate system with incremental coordinate system. (CO2)

Q.24 Write the rules for axis identification in CNC.(CO2)

Q.25 Describe circular interpolation with example. (CO3)

Q.26 Name the four types of part programming formats and explain any one. (CO3)