Q.27 State the working principle of USM. (CO1)

Q.28 Write classification of robot. (CO4)

Q.29 Write the properties of generator in USM. (CO2)

Q.30 Explain Universal Milling Machine with neat sketch. (CO4)

Q.31 Prepare simple Part program for Drilling. (CO5)

Q.32 Explain NC part programming Languages. (CO3)

Q.33 Explain part program structure with example. (CO4)

Q.34 Discuss various types of DNC system. (CO2)

Q.35 Explain constructional details of CNC milling machine. (CO2)

SECTION-D

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

Q.36 Explain the principle and process of EBM and state its limitations. (CO3)

Q.37 Explain the following milling Cutters with neat sketch. (Co5)

I) plain milling cutter   ii) End milling cutter

Q.38 Explain in details the various components of robot. Also give the main advantages and disadvantages of robots in industries.

(**Note:** Course outcome/CO is for office use only)

5th Sem / Automobile Engineering
Subject:- Advance Manufacturing Process

Time : 3Hrs.   M.M. : 100

SECTION-A

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

Q.1 CNC Machine started working in the year. (CO1)
a) 1900   b) 1940
c) 1980   d) None

Q.2 Computerized numerical control machines use (CO1)
a) Digital data & a computer
b) A computer and a CAM program
c) A computer, a CAM program & a digital data
d) None

Q.3 A Code for Program Stop (CO3)
a) G01   b) G02
c) M01   d) M00

Q.4 A CNC Machine uses (CO1)
a) Open loop system   b) Closed loop system
c) Both (a) & (b)   d) None

Q.5 G code for Input Unit (CO3)
a) G01   b) G02
c) G03   d) G70

Q.6 Collets in milling machines are generally used to

(CO5)
a) Hold cutters
b) Hold the work piece on table
c) Act as auxiliary spindle
d) None of the mentioned

Q.7 Which of the following is not the advantage of CNC machines? (CO2)
a) Reduced scrap rate
b) Improved strength of the components
c) Higher flexibility
d) Improved quality

Q.8 Which of the following system has feedback system? (CO2)
a) Open loop system   b) Closed loop system
c) Direct loop system   d) None of the above

Q.9 Laser is produced by (CO1)
a) Diamond   b) Ruby
c) Graphite   d) Magnesium

Q.10 Ultrasonic machining is based upon (CO3)
a) Vibrational waves of zero frequency
b) Vibrational waves of low frequency
c) Vibrational waves of high & low frequency
d) Vibrational waves of high frequency

SECTION-B

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

Q.11 Name the M code for "Spindle stop" and "Tool Change". (CO3)

Q.12 LASER Stands for_____ (CO3)

Q.13 Write full form of ECM. (CO3)

Q.14 Conversion of units is possible in case of CNC machines (True/False) (CO3)

Q.15 DNC stands for_____ (CO3)

Q.16 In 1954, the first programmable robot is design by _____ (CO4)

Q.17 In which year, OTC DAIHEN have introduced a line of arc welding and handling robots. (CO4)

Q.18 Open loop control systems are_____ accurate as compared to close loop control system. (CO1)

Q.19 First milling machine came into existence in about 1770 (True/False) (CO4)

Q.20 Cutting a slot in the head of a screw or bolt is the example or milling machine. (True/False) (CO1)

SECTION-C

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

Q.21 Give the advantages of NC and application of CNC machines. (CO2)

Q.22 Describe G00, G04, G32, G41, G42 code in part programming. (CO3)

Q.23 State the Disadvantages of Electro Chemical Machining. (CO1)

Q.24 Differentiate between absolute and Incremental coordinate system. (CO2)

Q.25 Describe NC Words. (CO1)

Q.26 Explain the following milling operations (Co5)
i) Face milling   ii) Side milling

(2)   180354/170354
(3)   180354/170354