



MANAV RACHNA
UNIVERSITY

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FORMERLY MANAV RACHNA COLLEGE OF ENGINEERING
NAAC ACCREDITED 'A' GRADE INSTITUTION


Declared as State Private University under section 2f of the UGC act, 1956

DEPARTMENT OF MECHANICAL ENGINEERING

"T3 Examination, May-2018"

Semester: 4th
Subject: Manufacturing Technology-II
Branch: ME
Course Type: Core
Time: 3 Hours
Program: B.Tech

Date of Exam: 17/05/2018
Subject Code: MEH211-T
Session: II
Course Nature: Hard
Max. Marks: 80

HOD: 

*Note: All questions are compulsory from Part A (2*10=20 marks). Attempt any two questions from part B (Each Questions carry 15 marks). Attempt any two questions from part C (Each Questions carry 15 marks).*

PART-A

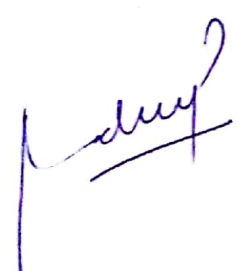
- Q1. Define the following-
- (i) Numerical Control System.
 - (ii) Machine Control Unit
 - (iii) Absolute and Incremental Programming.
 - (iv) Axis of NC Machine.
 - (v) Group Technology.
 - (vi) Metrology.
 - (vii) Screw Gauge.
 - (viii) Comparator.
 - (ix) Preparatory and Miscellaneous Codes.
 - (x) Linear and Angular measuring instruments.

PART-B

Q2. Classify the NC system on the basis of tool motion and explain the components of Machine Control Unit.

Q3. Explain NC, CNC and DNC Systems. What are the Advantages and Disadvantages of these machine Systems.

Q4. Write simple Programs in absolute system for machining Square, Triangular and Circular shape from a $4 \times 4 \text{ mm}^2$ block using G codes and M codes.



PART-C

Q5. Explain working of group technology. What are the stages for adopting Group Technology also write the advantages of group technology.

Q.6 Define Surface Finish and how we can measure it. What are the factors influencing surface finish ?

Q.7 Explain Components classification and coding in Group Technology. How to convert a Fixed Layout into a Group Technology layout?

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