

NAME \_\_\_\_\_

ROLLNO \_\_\_\_\_

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2006

### III B.TECH I SEMESTER REGULAR EXAMINATIONS, AIRCRAFT PRODUCTION TECHNOLOGY (AERONAUTICAL ENGINEERING)

NOVEMBER 2006

TIME-3HOUR  
MARK-80

**ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS.**

1. Name different methods of making sand moulds and state their applications.
2. (a) How are neutral, oxidizing and reducing flames obtained in a welding torch? Explain?  
(b) What is the principal of operation of electric arc welding? What are the equipments used in this?
3. With reference to relative motion between cutting tool and work piece, classify the different machining operations?
4. Write short notes on following
  - (a) Broaching method to generate internal teeth?
  - (b) Slotting operation
  - (c) Gear cutting
5. (a) Explain the superior features of CNC Machines over conventional machines  
(b) Explain with sketch the basic working CNC machines  
(c) Enumerate different G-codes and M-codes used in CNC part programming
6. (a) Differentiate between manual production and Automation?  
(b) Explain Ultrasonic-machining processes. Specify some of its process characteristics?
7. (a) Write a short note on the accuracy of LBM process?  
(b) What are the advantages and disadvantages of LBM process? Give its applications?
8. Write short notes on the following
  - (a) Rolling
  - (b) Forging
  - (c) Extrusion