

Final: 29-10-21

Course Code: 1930313

Roll No:

MLRS- R19



**MARRI LAXMAN REDDY**  
**INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

II B.Tech I Sem Supply End Examination, October 2021

**PRODUCTION TECHNOLOGY**

(MECHANICAL)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Answer any FIVE questions.

2. Each question carries 14 marks and may have a, b as sub questions.

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|---|----|---|----|-----|-----|
| 1 | a) | Give the steps in Sand casting process and explain briefly  | 7M | CO1 | BL4 |
|   | b) | Describe Centrifugal casting process and to what work piece configuration it is best suited   | 7M | CO1 | BL2 |
| 2 | a) | What are different types of Sand moulding? Explain its advantages, disadvantages and limitations                                    | 7M | CO1 | BL4 |
|   | b) | With neat sketch explain design of riser and its types?   | 7M | CO1 | BL4 |
| 3 | a) | What are the different types of Welded joints? Explain  | 7M | CO2 | BL4 |
|   | b) | What is Oxy-acetylene welding? Explain two methods of welding by means of oxy-acetylene blow pipe                                   | 7M | CO2 | BL4 |
| 4 | a) | Classify different welding process? To which group laser beam welding belongs? Explain about laser beam welding with a neat sketch. | 7M | CO2 | BL2 |
|   | b) | Differentiate between TIG and MIG welding?  | 7M | CO3 | BL2 |
| 5 | a) | Write difference between Resistance and Thermit welding?  | 7M | CO3 | BL1 |
|   | b) | Explain various welding defects.  | 7M | CO3 | BL4 |
| 6 | a) | Define Rolling? Explain principle and mechanism of rolling  | 7M | CO4 | BL4 |
|   | b) | What is High Energy Rate Forging processes explain?   | 7M | CO4 | BL1 |
| 7 | a) | What are the different Sheet metal operations? Explain  | 7M | CO4 | BL1 |
|   | b) | Difference between cold working and hot working process.  | 7M | CO5 | BL2 |
| 8 | a) | Explain with a neat sketch tools used in forging?   | 7M | CO5 | BL4 |
|   | b) | Differentiate between Impact extrusion and hydrostatic extrusion?   | 7M | CO5 | BL2 |

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