



Regulation R18 **Subject code: 2P4EA**
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A' Grade)
B.Tech IV Semester Regular Examinations, November 2020

Manufacturing Process

(Mechanical Engineering)
(Professional Elective-I)

Maximum Marks: 70

Date: 07.11.2020 Duration: 2 Hours

Part-A

All the following questions carry equal marks

(10X1M=10 Marks)

- 1 What is gating ratio?
- 2 Define investment casting.
- 3 What does gating system consist of?
- 4 What is the purpose of coating on the arc welding electrode?
- 5 Define Heat affected Zone.
- 6 Classify different testing methods of welding.
- 7 What are the disadvantages of forging processes?
- 8 Classify at least four types of extrusion process.
- 9 What is the difference between pattern and casting.
- 10 Enumerate principle of forging.

Part-B

Answer ANY FIVE QUESTIONS

(12MX 5=60Marks)

- 11 What do you understand by centrifugal casting? Explain (12M)
- 12 What purpose is served by the risers in sand casting? (12M)
- 13 Explain flame cutting process with neat sketch. (12M)
- 14 Describe the oxy-acetylene gas welding technique and give the applications. (12M)
- 15 Explain Laser beam welding with neat sketch. (12M)
- 16 Explain wire drawing process with neat sketch. (12M)
- 17 What are differences between TIG and MIG welding processes. (12M)
- 18 Explain any one of the following dies. (a) Progressive Die (b) Compound Die (6M+6M)
- 19 Explain advantages and application of sheet metal operations as compared to other process. (12M)
- 20 Classify different forging tools and explain any two of them. (12M)