



R17 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 1E7CB

B.Tech VII Semester Supplementary Examinations, July 2022

WELDING TECHNOLOGY

(Mechanical Engineering)

Maximum Marks: 70

Date: 06.07.2022 Duration: 3 Hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What is submerged arc welding process?
- 2 Classify the flames in oxy-acetylene gas welding process.
- 3 What is resistance welding?
- 4 How does resistance welding generate heat?
- 5 What is solid state welding process?
- 6 What are the advantages of diffusion welding?
- 7 Define Pressure welding process.
- 8 What are the industrial applications of narrow gap welding process?
- 9 List out the major defects which are causing in the weld?
- 10 What are the advantages of Radiographic Inspection ?

Part-B

Answer All the following questions.

(10MX 5=50Marks)

- 11 Explain the carbon arc welding technique with a neat sketch, also mention the applications. [10]
OR
- 12 Draw a neat sketch and explain the working of Electro slag welding. [10]
- 13 Briefly explain the construction and working of Resistance Welding process. [10]
OR
- 14 What are the steps involved in Resistance Seam Welding. [10]
- 15 List out the Advantages, Limitations and Applications of Explosive Welding process. [10]
OR
- 16 Explain friction stir welding (FSW) process with help of a neat sketch and list out its applications. [10]
- 17 Explain about electron beam welding process. [10]
OR
- 18 Explain the principle and operation of Thermit Welding. [10]
- 19 Explain Radiographic inspection technique. [10]
OR
- 20 Explain Ultrasonic inspection techniques. [10]