



R18 Regulation

Subject code: 2E7CB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, April 2024

WELDING TECHNOLOGY

(Mechanical Engineering)

Maximum Marks: 70

Date: 29.04.2024 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 Define welding.
- 3 What is Upset Butt Welding?
- 4 List down the any two applications of spot welding.
- 5 State any two characteristics Cold welding process.
- 6 Write the advantages of diffusion welding.
- 7 Write a short note on electron beam welding (EBM)
- 8 Explain welding automation in nuclear sector.
- 9 What are the limitations of Radiographic Inspection?
- 10 Explain the defect, lack of root penetration.

Part-B

Answer all the questions

(10MX 5=50Marks)

- 11 Briefly explain the working principle of Metal Inert Gas Welding and their components with a neat sketch? [10]

OR

- 12 Draw a neat sketch and explain the working of Electro slag welding. [10]
- 13 Briefly explain the construction and working principle of Resistance Welding process. [10]

OR

- 14 Explain the working of Spot Welding (SW) and their advantages and limitations. [10]
- 15 Explain the principle of Cold-Welding process and list out the applications. [10]

OR

- 16 Briefly explain the Friction stir welding process with neat diagram. [10]
- 17 Explain about electron beam welding process. [10]

OR

- 18 Explain welding automation in nuclear sector. [10]
- 19 Explain Radiographic inspection technique. [10]

OR

- 20 Write weldability of stainless steels. [10]