R18 Regulation *Subject code:2E7CB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, November 2023

WELDING TECHNOLOGY

(Mechanical Engineering)

Maximum Marks: 70 Date:08.12.2023 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 which carries 10M.
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	Define metal inert gas welding (MIG) process	L1
2	State tungsten inert gas welding (TIG) process.	L1
3	List down the applications of seam welding.	L1
4	Define resistance welding.	L1
5	What are the advantages of cold welding process?	L1
6	What are materials that can be welded using friction welding process?	L1
7	What are the applications of termite welding?	L1
8	What are the industrial applications of narrow gap welding process?	L1
9	Explain the classifications of weld joints.	L2
10	Write a short note on general guidelines to weld stainless steel parts.	L1
	Part-B	
Answer All the following questions.	(5X10M=50Marks)	
11	Briefly explain the working principle of Metal Inert Gas Welding and their components with a neat sketch? (10M)	L3
	OR	
12	Explain about the Oxyacetylene Gas Welding process and also state its advantages. (10M)	L2
13	Explain the working of Spot Welding (SW) and their advantages and limitations. (10M)	L2
	OR	
14	Explain the projection welding process wit help of a neat sketch. (10M)	L2
15	Explain the principle of Cold Welding process and list out the applications. (10M)	L2
	OR	
16	Briefly explain the Friction stir welding process with neat diagram. (10M)	L3
17	Explain operation of Thermit Welding. (10M)	L2
	OR	
18	Brief explain of atomic hydrogen welding. (10M)	L3
19	Write major defects which are causing in the weld and explain their remedies? (10M)	L2
	OR	
20	Write short notes on weldability of Aluminium alloys. (10M)	L2