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**Question Paper Code : 91820**

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019

Fourth/Seventh Semester

Mechanical Engineering

ME 6008 – WELDING TECHNOLOGY

(Common to Mechanical Engineering/Production Engineering)

(Regulations 2013)

(Also Common to PTME 6008 – Welding Technology for B.E. (Part-Time) – Sixth Semester – Mechanical Engineering – Regulations – 2014)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A

(10×2=20 Marks)

1. Define Welding.
2. Compare TIG and MIG welding.
3. What is Seam welding ?
4. What are the advantages of resistance butt welding ?
5. What is ultrasonic welding ?
6. Define Cold Welding.
7. What are the applications of Laser Beam welding ?
8. What is Friction stir welding ?
9. What is meant by weldability ?
10. List out the Non-destructive Testings used for Weldment testing



## PART – B

(5×13=65 Marks)

11. a) Explain with necessary sketches Shielded Metal Arc Welding process with advantages and limitations. (13)  
(OR)
- b) Discuss about the three types of flames produced in Oxy-Acetylene Gas welding. (13)
12. a) Enumerate with a neat sketch Flash Butt Welding process with advantages and limitations. (13)  
(OR)
- b) Discuss about the features of resistance projection welding. (13)
13. a) Enumerate the diffusion bonding process with its variants. (13)  
(OR)
- b) Explain with advantages and limitations explosive welding process. (13)
14. a) Discuss on Atomic hydrogen welding with advantages and limitations. (13)  
(OR)
- b) Elucidate with neat sketch principle and process of thermit welding. (13)
15. a) Explain weldability of stainless steels. (13)  
(OR)
- b) Explain non-destructive testing of weldments. (13)

## PART – C

(1×15=15 Marks)

16. a) Explain automation of welding in surface transport vehicles. (15)  
(OR)
- b) Discuss hot pressure welding process giving advantages and limitations. (15)