

**BACHELOR OF VOCATION**  
**Automotive Component Manufacturing**  
**Subject: Welding Technology**  
**Subject Code: LBME-102**  
**Semester: First**  
**October 2020**  
**Theory (External): 70 Marks**  
**Time: 03 hours**

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**INSTRUCTIONS TO THE STUDENTS**

1. Read the questions carefully and write the answers in the answer sheets.
2. Wherever necessary, the diagram drawn should be neat and properly labelled.
3. This questions paper comprises of 8 questions out of which student need to attempt any 4 questions.
4. All questions carry equal marks.
5. The time allotted will be 3 hours for examinations including time of downloading of question paper to emailing of answer books to the concerned Dean/IC.

## ESSAY TYPE QUESTIONS

1. Differentiate between laser welding and laser cutting operations. Mention their applications also.
2. Explain pressure vessel welding operation using suitable schematic diagram.
3. What is the purpose of preheating in case of welding of dissimilar metals? Mention various inert gases used in the welding of dissimilar metals.
4. Explain the working principle of spot welding with a schematic diagram.
5. What are the roles of squeeze pressure, current and water temperature at inlet and outlet in case of spot welding?
6. Explain the working principle of seam welding with a suitable diagram. What type of electrodes is used in its operation?
7. Write short notes with suitable diagrams on following;
  - a) Size and shape of welds,
  - b) Guns for spot welding
8. Write short notes on following:
  - a) Fixtures used in seam welding
  - b) Welding of cast iron to steel

\*\*\*\*\*END OF PAPER\*\*\*\*\*