

**BACHELOR OF VOCATION****Production Tool and Die Manufacturing****Subject: MOOC/Online Course-I(Fundamentals of Welding  
Sciences & Technology)****Subject Code: MC-501****Semester: Second****July 2022****Theory (External): 70 Marks****Time: 03 Hours****Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 2 marks.
3. Section B comprises 6 essay type questions out of which students need to do any 5. Each question carries 10 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

<b>Roll Number</b>									

**SECTION –A (SHORT/OBJECTIVE TYPE QUESTIONS)**  
(10x2=20 Marks)

- A) Define arc welding process.
- B) Define electrode and its types.
- C) What are the main functions of Flux.
- D) Describe lap joint with a neat sketch.
- E) Define metal inert gas welding (MIG)
- F) What is oxyfuel gas welding?
- G) What is constant power supply?
- H) What is Arc Characteristic?
- I) In a neutral flame, what is the temperature in the inner core?
- J) What is filler?

**SECTION –B (ESSAY TYPE QUESTIONS)**  
(5x10=50 Marks)

- 1. Explain the working principle of Metal Inert Gas Welding and their components with a neat sketch.
- 2. With a neat sketch, explain the construction and working of Resistance Butt Welding with their advantages and limitations.

- 3. What are the basic welding symbols? Explain the meaning the weld symbols.
- 4. Describe different Welding Positions and explain their applications.
- 5. What is the main function of the welding power source? Explain different what are the types of welding power source
- 6. What are thermo-ionic emissions? Differentiate between Field emissions and Secondary emission.
- 7. Describe Dynamic characteristic of welding arc.
- 8. Explain about the Oxyacetylene Gas Welding process and also its advantages.

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