

# CBCS Scheme

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15MA43

## Fourth Semester B.E. Degree Examination, June/July 2018 Joining Processes

Time: 3 hrs.

Max. Marks: 80

**Note:** Answer any *FIVE* full questions, choosing one full question from each module.

### Module-1

- 1 a. Define Welding. Explain the principle of welding with sketch. (08 Marks)  
b. With neat sketches, explain the types of weld joints. (08 Marks)

OR

- 2 a. Write a short note on : i) Arc welding procedure ii) Safety considerations in welding. (08 Marks)  
b. Explain edge preparation methods in welding, with sketch. (08 Marks)

### Module-2

- 3 a. Explain with sketch i) Coated Electrode ii) Cored Electrode. (08 Marks)  
b. With neat sketch, explain flux shielded metal arc welding. (08 Marks)

OR

- 4 a. Explain with sketch MIG welding. (08 Marks)  
b. With neat sketch, explain submerged arc welding. (08 Marks)

### Module-3

- 5 a. Explain with sketch, Seam welding. (08 Marks)  
b. Explain Friction welding with sketch. (08 Marks)

OR

- 6 a. With neat sketch, explain thermit welding process. (08 Marks)  
b. Explain with sketch, Spot welding. (08 Marks)

### Module-4

- 7 a. Write the differences between Soldering and Brazing. (08 Marks)  
b. Explain the steps followed during brazing process. (08 Marks)

OR

- 8 a. Explain the principles of good soldering process. (08 Marks)  
b. Explain with sketch : i) Torch brazing ii) Dip brazing. (08 Marks)

### Module-5

- 9 a. Explain with sketch, Welding defects and its causes. (08 Marks)  
b. With neat sketch, explain Magnetic particle Inspection method. (08 Marks)

OR

- 10 a. Explain with sketch, Formation of different zones in welding. (08 Marks)  
b. With neat sketch, explain Radiography Inspection method. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.