

17455

16117

3 Hours / 100 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answer with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following:** **20**
- a) State and sketch the types of welding joints. (any four)
 - b) State any four factors affecting selecting of power source for welding.
 - c) State the meaning of weldability and give the factors affecting it.
 - d) Give remedial procedure for any four welding defects.
 - e) Explain Induction brazing.
 - f) State the advantages of gas welding.
 - g) List the different processes used for welding of C.I. and suggest one most suitable process.
 - h) Define Arc stability and Arc blow.
- 2. Attempt any FOUR of the following:** **16**
- a) State the necessity of filler metal.
 - b) State any draw different positions of welding.
 - c) Draw and explain V-I characteristics of Arc.

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- d) Write down the purpose of heat treatment used in welding.
- e) State any four limitations of brazing.
- f) Describe TIG welding employed for Aluminium.

3. Attempt any TWO of the following: 16

- a) List and explain the gas welding equipment.
- b) Compare brazing, soldering and welding.
- c) List the different processes used for welding of mild steel. Explain MIG welding.

4. Attempt any FOUR of the following: 16

- a) Draw and explain leftward technique of welding.
- b) State the principle of brazing.
- c) State the effect of welding on the properties of metal.
- d) How the care and storage of electrode is taking place? Explain in brief.
- e) Explain torch brazing process.
- f) Explain furnace brazing process.

5. Attempt any TWO of the following: 16

- a) State and explain the metal transfer mechanism in Arc welding.
- b) List the different processes used for welding of stainless steel and explain oxy acetylene welding.
- c) Draw and explain HAZ.

6. Attempt any TWO of the following: 16

- a) List any four welding defects and state the causes of it.
 - b) Describe the process of solidification of metal in welding.
 - c) State the different systems of coding used for electrode and explain indian coding system.
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