17621

21718

3 Hours / 100 Marks Seat No. | | | | | | | | |

Instructions : *(1)* ***All*** *questions are* ***compulsory****.*
(2) Answer ***each*** *next main question on a* ***new*** *page.*
(3) Illustrate your answers with neat sketches ***wherever*** *necessary.*
(4) Figures to the right indicate full marks.

Marks

1. Attempt **any five**. **(5×4=20)**

a) Define TIG and state any two base metals welded by it.

b) State any two advantages and any two disadvantages of MIG.

c) Describe the process of FCAW.

d) Compare the process of SAW with MIG.

e) Explain the process of ESW.

f) Draw a neat sketch of Thermit welding.

g) State any two advantages and limitations of resistance welding.

2. Attempt **any two**. **(8×2=16)**

a) Explain the different types of shielding gases used in TIG welding.

b) Explain with neat sketch the process of plasma arc welding.

c) With a neat sketch explain the principle of MIG welding.

3. Attempt **any four**. **(4×4=16)**

a) Describe the process of Automatic welding.

b) Explain micro welding.

c) State the contents of WPS.

d) State and explain the different types of distortion.

e) State the advantages of ESW with its one application.

f) Compare the process of FCAW with TIG.

P.T.O.

Marks

4. Attempt **any two**. **(8×2=16)**

a) State the working of laser beam welding with neat sketch. Give two applications.

b) State and explain the advanced welding equipments used in latest weldings.

c) What is distortion ? State any four causes of distortion.

5. Attempt **any four**. **(4×4=16)**

a) State the different types of safety practices used in SAW.

b) Explain pipe line welding code.

c) Describe precision welding.

d) Draw a neat labelled sketch of Atomic hydrogen welding.

e) Explain the holding techniques used for SAW.

f) Explain structural welding code AWSD 1.1.

6. Attempt **any two**. **(8×2=16)**

a) State the fundamentals of Resistance welding explain any one in detail.

b) State the latest methods used in the welding and explain welding of plastic.

c) i) Explain process equipment code.

ii) Describe pedestal boom manipulator.
