

17456

**11920**

**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 of the following :**

**5 × 4 = 20**

- (a) Define Accuracy & Precision.
- (b) List the tools used in marking.
- (c) State the need of templates.
- (d) Describe the method of plotting ellipse by using elliptical trammel.
- (e) Compare Manual & Machine straightening.
- (f) State the applications of composites.
- (g) Describe any one mechanical method of cleaning.

**2. Attempt any FOUR of the following :**

**4 × 4 = 16**

- (a) Describe the method of chalk line for marking long straight line.
- (b) Describe the method of squareness testing by using engineers square.
- (c) State the need of surface cleaning & coating.
- (d) State any four importance of factory layout.
- (e) Describe the method of applied stiffeners.
- (f) How template can be used as a means of checking ?

- 3. Attempt any TWO of the following :** **8 × 2 = 16**
- (a) Compare line standard & end standard.
  - (b) Give the detailed classification of measurement.
  - (c) List and describe any one method of processing of composites.
- 4. Attempt any FOUR of the following :** **4 × 4 = 16**
- (a) Describe the method of vertical datum alignment by using plums line & surveyors level.
  - (b) Compare the method of Direct marking & Template marking.
  - (c) Describe the method of roundness testing by rotating on centres.
  - (d) Describe the method of thermal method of surface cleaning.
  - (e) State the need of web stiffeners.
  - (f) Describe the method of neat strips for straightening.
- 5. Attempt any TWO of the following :** **8 × 2 = 16**
- (a) Describe the process of marking of holes in angle sections.
  - (b) State the need of stiffening & explain the method of stiffening of large panels.
  - (c) List the types of plant layout. Describe product layout with neat sketch.
- 6. Attempt any FOUR of the following :** **4 × 4 = 16**
- (a) How template can be used to provide an economical arrangement of layout for press work ?
  - (b) Describe the process of marking out bolt holes for flanges.
  - (c) What are the factors which affects the selection of plant layout ?
  - (d) Describe the method of hot shrinking .
  - (e) Describe Dry method of surface cleaning.
  - (f) What is dynamics of plant layout ?
-