17456

15162 **3 Hours / 100 Marks** Seat No. *Instructions* : (1) All Questions are *compulsory*. (2)Illustrate your answers with neat sketches wherever necessary. (3) Figures to the right indicate full marks. Marks 1. **Attempt any FIVE :** 20 Define Sensitivity and Readability. (a) (b) Explain line standard. (c) State any one method of marking a large size plate. (d) Explain the method of hot shrinking for straightening. (e) State any four need of cleaning and coating. (f) Explain any one shop method of drawing an ellipse. (g) State the different types of tools used in manufacturing on shop floor. 2. **Attempt any FOUR :** 16 State the need of templates. (a) (b) State the essentials of layout. Give the broad classification of sources of errors. (c) (d) State the different compositions of composites. (e) State the method of roundness measurement by rotating on centres. (f) Explain the method of flat circles used for flatness testing. 3. **Attempt any FOUR :** 16 (a) Draw and explain process layout. (b) State and explain any one process used for processing of composites. Explain box template. (c)

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- (d) Explain any one chemical method of surface cleaning.
- (e) State the method of marking out belt holes for flanges.
- (f) State the method of marking out holes in angle section.

4. Attempt any TWO :

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- (a) State the method for setting out sheet metal febrication.
- (b) Define plant layout and give any three application of plat layout in details.
- (c) State the methods used for marking out T-section with a neat sketch.

5. Attempt any FOUR :

- (a) Explain the use of heat strip for straightening.
- (b) Explain dry surface cleaning method.
- (c) Give the importance of plant layout.
- (d) What are the different methods used for stiffing sheet metal ?
- (e) State the requirement of web stiffness.
- (f) State the methods used for protection and storage of template.

6. Attempt any FOUR :

- (a) How template act as a means of Guide for cutting operation ?
- (b) Explain Thermal method of surface cleaning.
- (c) Explain the method of stiffing large panels.
- (d) State the use for applied stiffness.
- (e) State the method of heat triangles for straightening.
- (f) State any four application of composites.

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