

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING – SEMESTER – III • EXAMINATION – SUMMER -15**

Subject Code : 3335505

Date: 14 / 05 / 2015

Subject Name : FAB . TECH. - I

Time: 2:30 pm to 5:00 pm

Total Marks: 70

**Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) Prepare a chart of commercial forms of metal for & state their typical application. **07**
- (b) Draw a neat sketch of typical Roof truss & Describe the their structural fabrication Terminology **07**

- Q.2** (a) Find out COST & weight of following sections for 2 M length **07**  
 ( Take density/ sp. weight of material = 7.85 gm/ cm<sup>3</sup> )  
 ( Take cost of material = 75 RS./ kg )

Data For T-Section :-

Sr. No	Dimension In Mm			
	H	B	t <sub>w</sub>	t <sub>f</sub>
1	80	80	5	5

- (b) Draw a neat CHART Classification of cutting process Compare plasma & fuel gas cutting process. **07**
- OR
- (b) List out the various str. Fab. Codes . Described in brief : AWS - D1.1 **07**
- Q.3** (a) Describe a typical Pro-forma for bill of material for structural fabrication work. Describe the meaning of each title of each column and raw & Describe the importance of BOM in Str. Fab. **07**
- (b) Describe in brief with neat Sketch **07**  
 1. Types of Nuts, 2 Types of washers

OR

- Q.3** (a) Prepare a geometrical construction under following condition by using compass, ruler but without protector. Write the steps of construction for it. **07**
- Draw an angle without using protector (m CAB=180° ) and divide this angle in to  $\phi_1=30^\circ$ ,  $\phi_2=45^\circ$ ,  $\phi_3=90^\circ$ ,  $\phi_4=120^\circ$ ,  $\phi_5=60^\circ$   
 ( use theme of bisecting of Angle ).

- (b) Describe in brief : - **07**  
 1) Define the term ‘Erection ‘  
 2) Describe erection tools tackle in brief  
 3) Describe in brief precautions at erection site for fabrication work
- Q.4** (a) Compare Mechanical fastening process and Welding **07**
- (b) Classify the Hammers in chart form. **07**  
 1. Draw their neat sketches.  
 2. Label out its various parts / elements.  
 3. State it’s specification. & States its typical application
- OR
- Q. 4** (a) List out the sequence of str. Fabrication job. **07**  
 Describe template shop operations.
- (b) Compare Welding & other joining Process **07**
- Q.5** (a) Calculate the area of hexagon by dividing hexagon in ( size of A/F = 80 ) **07**  
 Various 3 types geometrical shape and also compare the result of area.
- (b) Describe the role of quality control department in structural fabrication industry. **07**
- OR
- Q.5** (a) List out the names: - Third party inspection agencies with their abbreviation. **07**  
 Describe them in brief.
- (b) Describe in brief advantages of steel as a fabrication material **07**

THE END  
 BEST OF LUCK

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