

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – III-EXAMINATION – WINTER 2015

Subject Code: 3335505

Date: 09/12/2015

Subject Name: FAB TECH -I

Time: 10:30 AM TO 1:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Write your seat no. and enrolment no. in the above given space Q. PAPER.
5. Answer with neat sketch and to the point.

- Q.1** (a) Find out COST & weight of following sections for 5 M length **07**
(Take density/ sp. weight of material = 7.80 gm/ cm^3 &
cost of material = 150 RS./ kg)

All Dimension are in mm
Data For T-Section :-

NO.	DIMENSION IN MM			
	H	B	t_w	t_f
1	160	100	8	10

- (b) Define the term FABRICATION. Classify various types / methods of fabrication and state their area of application **07**

- Q.2** (a) Described in brief :- The General notes given / use in structural fabrication drawing. **07**

- (b) Prepare tabulated chart of commercial forms of metal for any 7 **07**

OR

- (b) Prepare a geometrical construction under following condition by using compass, ruler but without protector. Prepare a rectangle ABCD having a length $L = 80 \text{ mm}$ and width $W = 60 \text{ mm}$ Write the steps followed for this construction. State the length of diagonal achieved by drawing. **07**

- Q.3** (a) Described in brief advantages of steel as a fabrication material **07**

- (b) Described with neat sketch Trammels and state their applications / practical use **07**

OR

Q.3 (a) Described the procedure of fabrication of steel structure as per IS – 800 with their salient features. **07**

(b) List out the fabrication operation work performed in structural fabrication workshop. Described in brief : Any two **07**

Q.4 (a) Classify the various cutting process ? **07**
Described plasma cutting process in brief ?

(b) Describe in brief with neat Sketch: **07**
Structural Fit-up & Set-up Of (I - section)

OR

Q.4 (a) 1. Classify the various types of punches. **07**
2. Draw their neat sketch Label its element.
3 Described in very brief state its typical application

(b) Describe the method of erection of Industrial Shade steel structures with neat sketch. **07**

Q.5 (a) Draw a neat sketch of typical Roof truss & **07**
Describe their structural fabrication Terminology

(b) Describe the process of inspection in structural fabrication industry **07**

OR

Q.5 (a) Describe in brief with neat Sketch terminology of bolts. **07**
Classify the various standard Mechanical fasteners / fastening item.

(b) Find cost of 2 Meter of 80mm A / F MATERIAL. **07**
(Take density/ sp. weight of material = 7.85 gm/ cm^3)
(Take cost of material = 85 Rs./ kg.
