Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 335503 I Subject Name: Welding Technology-1			
Tim	e: 02	2.30 pm - 05.00 pm Total Marks: 70	
Inst	1. 2. 3.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. English version is considered to be Authentic.	
Q.1	(a) (b)		07 07
Q.2	(a) (b)	Explain in brief following welding terminology (Any 4) 1. Current rating 2. O.C. voltage 3. Short circuit current 4. Duty cycle 5. Insulation	07 07
	(b)	OR 1) Compare :- MMAW Electrodes E-7018 and E-6013 2) Compare :- SMAW and SAW	07
Q.3	(a) (b)	Explain selection of following consumables. Cellulosic, Rutile, Oxidizing, Iron oxide Explain electrode coating ingredients and their function	07 07
	` ,	OR	
Q.3	(a)	 Compare Polarity 'DCRP & DCSP' with neat sketch State advantage of ESW process. 	07
	(b)	Give classification and coding of electrode as per 'AWS' with example	07
Q.4		Explain factor affecting selection of types of edge preparation. Describe working principle of 'SMAW'. With neat sketch. OR	07 07
Q. 4	(a) (b)	Explain and Draw neat sketch of welding position in SMAW Explain in brief: - Advantages and disadvantages of overlay welding process	07 07
Q.5	(a)	Prepare WPS typical pro-forma as per ASME sec IX for SMAW for carbon steel	07
	(b)	Explain in brief: 1) Fectors affecting "arc blow". 2) Causes and remedies of arc blow. OR	07
Q.5	(a)	Explain working principle of SAW with neat sketch	07
	(b)	Explain in brief: F-number, P-number, A-number	07
