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## GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-III • EXAMINATION - WINTER • 2014

	•	ct Code: 3335504 Date: 01-12-20 ct Name: Welding Technology-I	14
,	•	10:30 am - 01:00 pm Total Marks: '	70
_		<ol> <li>Attempt all questions.</li> <li>Make suitable assumptions wherever necessary.</li> <li>Figures to the right indicate full marks.</li> <li>English version is considered to be Authentic.</li> </ol>	
Q.1	(a) (b)	Explain the term "Fusion Welding Process" with neat sketch.  Describe factors affecting selection of welding process.	07 07
Q.2	(a)	Describe SMAW with neat sketch.	07
	(b)	Differentiate between DCSP and DCRP with neat sketches.  OR	07
	(b)	Draw Classification Chart of Arc Welding Power sources. State why power source is required for welding.	07
Q.3	(a) (b)	Draw neat sketch of Welding Transformer. Describe its working.  Draw neat sketch of OCV and explain it.  OR	07 07
Q.3	(a) (b)	Draw neat sketch of V-I characteristics of Welding Transformer and explain. Draw neat sketch of CCV and explain it.	07 07
Q.4	(a) (b)	Draw neat sketch of Weld bead Geometry and explain it.  Draw neat sketch of standard location of elements of Welding Symbols.  OR	07 07
Q. 4	(a) (b)	Describe principle of SAW with neat sketch.  Draw neat sketches of any FIVE Welding Position for butt welds and State their features.	07 07
Q.5	(a)	Draw neat sketch of Welding Arc. Describe Arc initiation methods with neat sketches.	07
	(b)	Explain Scope of ASME Welding Codes in Fabrication Industries.  OR	07
Q.5	(a) (b)	Describe coding method of Consumable Electrode with suitable example.  Describe any SEVEN defects in weld with neat sketches, its causes and remedies.	07 07

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