Seat No	).:	: Enrolment No			
		GUJARAT TECHNOLOGICAL UNIVERSITY			
		PLOMA ENGG IV <sup>th</sup> SEMESTER–EXAMINATION			
•		le: 345504	Date: 20/06/2	2012	
•		me: Welding Technology-II			
		) pm – 05:00 pm	Total Marks	s: 70	
Instru					
		tempt all questions. ake suitable assumptions wherever necessary.			
		gures to the right indicate full marks.			
	_	glish version is considered to be Authentic			
Q.1	(a)	Explain briefly the need, scope and applications of weldi	ng as a	07	
	(b)	manufacturing process. State factors affecting selection of TIG welding process a	and explain	07	
	(6)	principle with neat sketch.	ша схріаш	01	
Q.2					
	(a)	State effect of process parameters on weld quality in GTA	AW process.	07	
	(b)	Differentiate between TIG and MIG welding process.		07	
	(b)	OR Discuss the working principle of Pluses MIG welding ar	nd state the	07	
	()	advantages of it.	ia state the	•	
Q.3		_			
	(a)	Explain principle of plasma arc welding with neat sketch	and list the	07	
	(b)	process parameters.  Explain the working principle of Laser Beam Welding a	nd discuss the	07	
	(8)	advantages of Laser Beam welding.	na aiseass the	01	
		OR			
Q.3	(a)	Explain principle of FCAW and state advantages, limitations and		07	
	(h)	application.  Explain working principle of Electron Beam Welding ar	nd discuss the	07	
	(D)	advantages of Electron Beam Welding.	d discuss the	01	
Q.4					
	(a)	Explain principle of FCAW and state advantages, limitat	ions and	07	
	(b)	applications.  Explain with neat sketch working principle of Gas Meta	l Ara walding	07	
	(b)	and state the advantages.	Arc welding	01	
		OR			
Q. 4	(a)	÷ • • • • • • • • • • • • • • • • • • •	ain with neat sketches different types of distortions in welding, its <b>0</b>		
	(b)	causes and remedies.	and DOD in a	07	
	(b)	Explain briefly the need and importance of WPS, WPQ a fabrication industry.	ilu PQK ili a	U1	
Q.5		indirection industry.			
	(a)	Define the term 'weld Defect' and explain different types	of weld	07	
	/I= \	defects, its causes and remedies.	1	^-	
	(b)	Write a brief note on mechanization of Arc Welding Procits advantages.	cesses and state	07	
		OR			
Q.5	(a)	Write a brief note on safety norms and standard as per O	HSAS/EHS.	07	

(b)

07