Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER – VI (OLD).EXAMINATION – WINTER 2016

Subject Code: 160805 **Date: 24/10/2016**

Subject Name: Advanced Microprocessors

Time: 10:30 AM to 01:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Draw and explain the block diagram of 8288.	**07**
	(b)	Draw and Explain Flag register of 8086.	**07**
Q.2	**(a)**	Explain logical address, offset address and physical address by appropriate example.	**07**
	(b)	Draw and explain Minimum mode 8086 system.	**07**
		OR	
	(b)	Draw and explain Maximum mode 8086 system.	**07**
Q.3	**(a)**	Explain segment registers in detail.	**07**
	(b)	Draw and Explain Flag register of 8086.	**07**
		OR	
Q.3	**(a)**	Draw and Explain the interfacing diagram of 8084 clock generator with 8086 microprocessor.	**07**
	(b)	Explain MACRO in detail with format and example.	**07**
Q.4	**(a)**	Explain the following Pins of 8086. 1. HLDA 2. NMI 3. ALE 4. (INTA)' 5. READY	**07**
	(b)	Explain the rules for segmentation of 8086.	**07**
		OR	
Q.4	**(a)**	Explain the following assembler directives of 8086. 1. DT 2. DUP 3. ORG 4. PROC 5. ENDP	**07**
	(b)	Explain the following instructions of 8086 with example. 1. PUSHF 2. XLAT 3. LDS 4. DAA 5. SHR	**07**
Q.5	**(a)**	Write ALP to find average of ten 16-bit numbers.	**07**
	(b)	Write ALP to find maximum number from given array.	**07**
		OR	
Q.5	**(a)**	Write ALP to copy the data from register Ax into Bx, Cx & Dx and DI using register mode.	**07**
	(b)	Write ALP to find minimum number from given array.	**07**

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