czar No.____



SARDAR PATEL UNIVERSITY

BCA Semester-3 Examination, 2022 Old Course US03EBCA01 || INTRODUCTION TO MICROPROCESSORS [NC]

Time: 12.00 p.m. – 02.00 p.m.	, -, - _{/ }}	·	Marks: 70

Q-1	L	Select the appropriate option for the following	ing questions:			
	1)	A flag is a one type of				
		. T . 1	Gate			
		B. Flip-Flop	None			
	2)	The is responsible for decoding and	executing instructions			
			BUS			
		B. BIU D.	EU			
	3)	DIV stands for				
		A. Division C.	Signed Division			
		B. Unsigned Division D.	Non			
	4)	AND – AND corresponding operation	nds.			
		A. Bits of two C.	Words of two			
		B. Bytes of two D.	All of these			
	5)	of Operation	eft.			
		A. each Bits C.				
		B. each Bytes D. JZ is executed when the zero flag is	all Bytes			
	6)					
			Set			
			None			
	7)	The SEGMENT directive is used to indicate the of logical segment.				
		A. start C.	end			
		B. address D.	None			
	8)	8) There are types of control structure in assembly language programs				
		A. 4	3			
		B. 2	None			
•	9)	An END directive ends the	•			
		A. segment C.	program			
		B. procedure D.	None of these			
	10)	Kbytes are allocated for Data Segment register.				
		A. 64 C.	-			
		B. 32 D.	16			
Q-2		Tick (TRUE or FALSE) and Fill in the blank	ks. 08			
	1)	The capacitors are used to balance power supply in Computer. [TRUE/FALSE]				
	2)	NOT stands for Invert each Bit. [TRUE/FALS	·			
	3)	JZ affects ZE flags. [TRUE/FALSE]				
	4)	The LABEL directive is used to give name to current value in the location counter. [TRUE/FALSE]				

and the same	5)	The assembler list file extension is		
	6)	AAA stands for		
	7)	SHL stands for Shiftleft.		
	8)	The full form of DB directive is		
Q-3		Give short answers of the following questions: (ANY TEN)	•	
	1)	Name the two functional parts of the 8086 architecture and also write use of parts.	20	
	2)	Explain the following terms: 1) ALU 2) Flag		
	3)	Define: Decoder and its function in EU.		
	4)	Explain NOT instruction with example.		
	5)	State the INC – Increment instruction		
	6)	Explain CMP instruction with example.		
	7)	Explain ROL instruction with example.		
	8)	Explain LOOPZ instruction with example.		
	9)	Explain ROR instruction with example	,	
	10)	Write the use of directives: ASSUME & LABEL.		
	11)	What is Assembler Directives? List all directives.		
	12)	Write syntax of multiple IF-THEN-ELSE.		
Q-4		Give Long answers of the following questions: (ANY FOUR)		
	1)	Explain BIU in detail.	32	
	2)	Explain 8086 internal architecture with diagram.		
	3)	Explain INC & DEC instructions in detail.		
,	4)	Explain MUL instruction in detail with example.		
:	5)			
•	6)	What are the differences between Unconditional and conditional JUMP instructions? Explain with an example. Write a short note on Shift instructions SHL and SHR with example.		
7	7)	Explain structure of assembly program.		
8	8)	Which are the Looping structures? Explain any one in detail.		

