



DF-3004

Second Year B. Sc. (Sem. III) Examination March / April - 2016

Electronics for Computer Science: Paper - IV

(Microprocessor Circuit & Application)

Time: 2 Hours] [Total Marks: 50

Instructions:

(1)

નીચે દર્શાવેલ 🚁 નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.	Seat No.:
Fillup strictly the details of - signs on your answer book. Name of the Examination:	
◆ S. Y. B. Sc. (SEM. 3)	
Name of the Subject :	 (
◆ ELECTRONICS FOR COMPUTER SCIENCE - 4	
→ Subject Code No.: 3 0 0 4 → Section No. (1, 2,):1,2,3	Student's Signature

- (2) All questions are compulsory.
- (3) Symbols and terminology used here have their usual meanings.
- (4) Scientific calculator is allowed.
- (5) Mobile (Cell phones) are strictly prohibited.

Q. 1 to 12 Multiple choice questions: (1 mark)

Q. 13 to 22 Multiple Choise Questions: (2 marks)

Q. 23 to 28 Multiple Choice Questions: (3 marks)

O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ O.M.R. Sheetની પાછળ છાપેલ છે.

Important instructions to fillup O.M.R. Sheet is given on back side of the provided O.M.R. Sheet.

DF-3	[Contd
	(D) 8
	(C) 5
	(B) 3
	(A) 2
4	How many buses are connected as part of the 8085A microprocessor ?
	(D) None of these
	(C) I/O
	(B) ALU
	(A) CPU
3	The circuits in the 8085A that provide the arithmetic and logic functions are called the :
	(D) BASIC interpreter instructions
	(C) machine language code
	(B) firmware
	(A) assembly language
2	The software used to drive microprocessor-based systems is called :
	(D) All of these
	(C) assembly language
	(B) binary machine code
	(A) hexadecimal machine code
1	Because microprocessor CPUs do not understand mnemonics as they are, they have to be converted to

5		register in the 8085A that is used to keep track of the memory address e next op-code to be run in the program is the :	S
	(A)	stack pointer	
	(B)	program counter	
	(C)	instruction pointer	
	(D)	accumulator	
6	How	many bits are used in the data bus ?	
	(A)	7	
	(B)	8	
	(C)	9	
	(D)	10	
7	Whic	h bus is a bidirectional bus ?	
	(A)	address bus	
	(B)	data bus	
	(C)	address but and data bus	
	(D)	None of these	
8	_	Single-bit indicators that may be set or cleared to show the results of logical or arithmetic operations are the :	
	(A)	flags	
	(B)	registers	
	(C)	monitors	
	(D)	decisions	
DF-3	004_A	[Contd.	••

9	The technique of assigning a memory address to ech I/O device in the computer system is called :			
	(A)	memory-mapped I/O		
	(B)	ported I/O		
	(C)	dedicated I/O		
	(D)	wired I/O		
10	When	n was the first 8-bit microprocessor introduced ?		
	(A)	1969		
	(B)	1974		
	(C)	1979		
	(D)	1985		
11	other (A) (B)	ch of the following buses is primarily used to carry signals that direct ICs to find out what type of operation is being performed? data bus control bus address bus address decoder bus		
12	What	t type of circuit is used at the interface point of an input port ?		
	(A)	decoder		
	(B)	latch		
	(C)	tristate buffer		
	(D)	None of these		
DF-3	004_ <i>A</i>	4 [Contd		

DF-3	3004_ <i>A</i>	A] 5	[Contd
	(D)	11 H	
	(C)	14 H	
	(B)	55 H	
	(A)	10 H	
17	If (A	A) = CD H and (B) = BC H then A-B =	
	(D)	None of these	
	(C)	FF H	
	(B)	A2 H	
	(A)	CD H	
16	The	2's compliment of 33H is	
	(D)	AF H	
	(C)	ВСН	
	(B)	24H	
	(A)	DF H	
15	The	1's compliment of 50H =	
	(D)	None of these	
	(C)	EF H	
	(B)	B2H	
	(A)	11H	
14	If (A	A) = DE H and (B) = 11 H then A+B =	
	(D)	None of these	
	(C)	Both of these	
	(B)	45 H	
	(A)	11 H	

If (A) = 55H & Data is 10 H, then what will be XRI A?

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DF-3	8 004 _ <i>A</i>	A] 6 [Contd
	(D)	None of these	
	(C)	HL pair and DE pair	
	(B)	HL pair and AB pair	
	(A)	AB pair and DE pair	
22	The	instruction XCHG is used to interchange	
	(D)	None of these	
	(C)	Both of these	
	(B)	HL pair	
	(A)	BC pair	
21	LXI	B will initiate	
	(D)	1E H	
	(C)	11 H	
	(B)	09 H	
	(A)	13 H	
20	If (C INR	C) = 1D H then what will be the (C) after executive the in C	struction
	(D)	None of these	
	(C)	Both of these	
	(B)	22 H	
	(A)	11 H	
19		A)=11 H and if (C)=22 H, then what will be (A) after execution MOV A, C	iting the
	(D)	None of these	
	(C)	OR operation between (C) and 7E H	
	(B)	AND operation between (A) and (B)	

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ORI C, 7E H will perform

(A) AND operation between (A) and 22H

23		t will be the (A) after executing the operation, A+B-C, if $(C) = 11 \text{ H}$	(A)=33 H,
	(A)	72 H	
	(B)	С7 Н	
	(C)	44 H	
	(D)	33 H	
24		A) = 44H and (B) =70 H then, what will be the (A) after action ANA B ?	executing
	(A)	D3 H	
	(B)	40 H	
	(C)	73 H	
	(D)	None of these	
25		e (A) = 55H and (B) = 33 H, then what will be (A) after uction A-B and then A+B	executing
	(A)	12 H	
	(B)	55 H	
	(C)	82 H	
	(D)	62 H	
DF-3	004_A	A] 7	[Contd

DF-3	004_ <i>A</i>	8 [108÷4]
	(D)	42 H
	(C)	00 H
	(B)	01 H
	(A)	73 H
28		t will be the content of an Accumulator after executing the following actions, ORA B then ANA A, if (A)=40 H and (B) = 33 H?
	(D)	None of these
	(C)	To clear register H
	(B)	To clear register B
	(A)	To clear an Accumulator
27	XRA	A Can be used
	(D)	DE H
	(C)	СА Н
	(B)	EF H
	(A)	AB H

What will be the 2's compliment of register C if (C)=11 H?

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