DF-2998
Second Year B. Sc. (Sem. III) Examination
March/April – 2016
Applied Electronics: Paper - IV
(Microprocessor Circuit & Application)

Time: 2 Hours

[Total Marks: 50]

Instructions:

(1) Fill up strictly the details of signs on your answer book.

(2) All 28 questions are compulsory.

(3) Symbols and terminology used in the paper have their usual meaning.

(4) Figures to the right indicate full marks.

(5) Scientific calculator is allowed.

(6) Mobile (cell phone) are strictly prohibited.

Q. 1 to 12 Multiple choice questions: (1 mark)
Q. 13 to 22 Multiple Choisue Questions: (2 marks)
Q. 23 to 28 Multiple Choice Questions: (3 marks)

O.M.R. Sheet बड़ी अंगेली अड़की सुनाओ आपेक आपेक
O.M.R. Sheet बड़ा पत्र आपेक आपेक आपेक आपेक

Important instructions to fill up O.M.R. Sheet are given on back side of the provided O.M.R. Sheet.
1 The full form of ALU is
   (A) Automatic Logic Unit
   (B) Arithmetic and Logic Unit
   (C) All Logic Unit
   (D) None of these

2 The 8085 is a micro-processor having
   (A) 4 Bits
   (B) 16 Bits
   (C) 8 Bits
   (D) 32 Bits

3 The physical components of system is called
   (A) Program
   (B) Hardware
   (C) Software
   (D) None of these

4 The 8085 microprocessor has
   (A) Control Bus
   (B) Higher Order Address Bus
   (C) Multiplex Bus
   (D) All of these
5 The full form of ALE is:
   (A) Addressed Latch Enable
   (B) Automatic Linear Electronics
   (C) Both of these
   (D) None of these

6 Multiplex bus is
   (A) Unidirectional
   (B) By directional
   (C) Multidirectional
   (D) None of these

7 A semi conducted device made by LSI technique with ALU, register array and control circuit in single chip is
   (A) Micro controller
   (B) Micro computer
   (C) Micro processor
   (D) None of these

8 An accumulator is working as
   (A) General purpose pad
   (B) Specific processing unit
   (C) Both of these
   (D) None of these
9 ROM stand for
   (A) Random only memory
   (B) Read only memory
   (C) Both of these
   (D) None of these

10 The unit which provides the necessary timing and control signals to the operations in microcomputer is
   (A) Central Processing Unit
   (B) Timing Unit
   (C) Control Unit
   (D) None of these

11 Programmable peripheral interface is
   (A) 8085
   (B) 8051
   (C) 8255
   (D) None of these

12 BSR stands for
   (A) Bit set reset
   (B) Bus set reset
   (C) Battery set reset
   (D) None of these
13  XRA A = 
    (A)  11 
    (B)  00  
    (C)  Both of these 
    (D)  None of these 

14  If (A) = 10H and (B) = B1H then A+B = 
    (A)  11H 
    (B)  B2H 
    (C)  C1  
    (D)  None of these 

15  The one’s compliment of 42H = 
    (A)  ABH 
    (B)  24H 
    (C)  BCH 
    (D)  None of these 

16  The two’s compliment of 10H is 
    (A)  F0 H 
    (B)  A2 H 
    (C)  01 H 
    (D)  None of these 

17  If (A)=B6 H and (C)=A2 H then A-B =  
    (A)  10 H 
    (B)  55 H 
    (C)  14 H 
    (D)  None of these
18 ANA B will performed
    (A) AND operation between (B) and (B)
    (B) AND operation between (A) and (B)
    (C) Both of these
    (D) None of these

19 If (B)=11 H and if (C)=22 H then what will be (C) after executing the instruction MOV C, B
    (A) 11 H
    (B) 22 H
    (C) Both of these
    (D) None of these

20 If (C)=10 H then what will be the (C) after executive the instruction INR C
    (A) 13 H
    (B) 09 H
    (C) 11 H
    (D) None of these

21 LXI H will initiate
    (A) BC pair
    (B) HL pair
    (C) Both of these
    (D) None of these

22 The instruction used to inter change the contain of HL pair and DE pair =
    (A) XCHG
    (B) EX-CHANGE
    (C) XRA
    (D) None of these
23 What will be the (A) after executing A+B+C if (A)=00 H, (B) and (C)=11 H

(A) 72 H

(B) C7 H

(C) 7C H

(D) None of these

24 If (A)=23 H and (B) = 70E H then, what will be the (A) after executing instruction ORA B

(A) 22 H

(B) 37 H

(C) 73 H

(D) None of these

25 If the (A) = 62 H and (B) = 10 H then, what will be (A) after executing instruction A+B and then A-B

(A) 12 H

(B) 26 H

(C) 82 H

(D) 62 H
26. What will be the tow’s compliment of register B if (B) = 55H

(A) AB H  
(B) BC H  
(C) CA H  
(D) DA H

27. To clear an accumulator, one can use e

(A) XRA A  
(B) MVI A, 00 H  
(C) Any of these  
(D) None of these

28. What will be the content of an accumulator after executing the following instructions - ANA B then ORA A, if (A)=11 H and (B)=22 H

(A) 72 H  
(B) 01 H  
(C) 22 H  
(D) 11 H