

**Exam.Code:0922**  
**Sub. Code: 6839**

**1059**

**B.E. (Information Technology) Fourth Semester**  
**ITE-472/401: Microprocessor and Assembly Language Programming**

**Time allowed: 3 Hours**

**Max. Marks: 50**

**NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.**

x-x-x

I. Attempt the following:-

- Generate *MEMR*, *MEWR*, *IOR*, *IOW* signals from *IO /M*, *RD*, *WR* signals.
- Write instructions to globally enable and disable all the interrupts.
- How to initialize the stack? Write all the instructions in which stack area is used by microprocessor itself during programming.
- How many pins are available in 8085 microprocessor?
- If the memory chip size is 4096X8 bits, how many chips are required to make up 16 K bytes of memory? (5x2)

**UNIT - I**

- Interface 1 chip of 256 bytes of RAM and 1 chip of 8K bytes of ROM to 8085 microprocessor. Specify address range for all chips and draw circuit diagram. (10)
- Interface 8085 microprocessor with seven segment display.
  - Write program to find larger number out of two numbers. (5,5)
- Draw and explain internal block diagram of 8085 microprocessor.
  - Explain following instructions each with the Help of an example:-
    - LX1 Rp, 16 bit address
    - CMP R
 (5,5)

**UNIT - II**

- Write a program to check pending status of RST 6.5 interrupt while servicing RST 7.5 interrupt. Use appropriate main dummy program. (10)
  - Clear the contents of all the flags using stack area.
- Write a program to turn ON and OFF 8 LEDs continuously connected at port address 01 h. Insert delay of 0.5 second between each ON & OFF (with clock frequency 2 MHZ). (10)
- Write note on following chips:-
  - 8255
  - 8259
 (5,5)

x-x-x

Exam.Code:0922  
Sub. Code: 7963

1059  
B.E. (Information Technology)  
Fourth Semester  
ITE-403: Cyber Laws and IPR (Old)  
(Batch 2015-2016)

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) What is Domain Name? What have been the disputes in this area?
- b) Name to E-Commerce models? Give Examples
- c) Who are Netizens
- d) What is Fire Wall? How is it implemented?
- e) Name four Grey Areas of IT Act of 2000. (5x2)

UNIT - I

- II. Why do we need Network Security in cyber space? Explain Network Security. (10)
- III. How is revenue generated in E-Commerce? What are the different models of revenue generation? (10)
- IV. Write short notes on:-
  - a) Encryption Techniques
  - b) Digital Signatures (10)

UNIT - II

- V. What is relevance of Copy Right in the Digital World? What are the international Treaties and Conventions as related to IPR? (10)
- VI. What is the need for IT Act? What are the main provisions of IT Act of 2000? (10)
- VII. What is a Cyber Offence? How is it different from Cyber Crime? What are the various cyber offences and crimes that are being committed nowadays? How can Cyber Law check these crimes? (10)

x-x-x

1059  
B.E. (Information Technology)  
Fourth Semester  
ITE-473/402: Computer Networks

Allowed: 3 Hours

Max. Marks: 50

**IE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What are the key elements of a protocol?
- b) What does the number on a NAK frame mean for selective repeat ARQ?
- c) Define forwarding in Network layer-
- d) What is port address?
- e) What is the relationship between plain text and ciphertext (5x2)

UNIT - I

- II. a) Network devices generally functions at the lower three layer of the OSI reference model. Briefly explain the reason.
- b) If 10100101 is the original messages and  $x^3 + 1$  is generator polynomial, then calculate the data stream send by sender. (2x5)
- III. a) What are flow control protocols? Explain all operations of Go-Back-N ARQ in detail with diagrams.
- b) Compare selective Repeat ARQ with GO-Back-N ARQ. (6,4)
- IV. a) Explain the frame formats of IEEE 802.3 Standard in detail.
- b) Draw the flow diagram to explain the working of CSMA along with persistence strategies. (4,6)

UNIT - II

- V. a) Differentiate between Datagram and Virtual Circuit in tabular form.
- b) Explain the Hierarchical routing in detail using suitable example. (2x5)
- VI. a) Explain Three-Way Handshake Mechanism used by TCP to terminate a Session reliably.
- b) Explain IP Header in detail. (2x5)
- VII. Write Short notes on following:
  - a) DNS
  - b) Message security (2x5)

x-x-x