

**Federal Board HSSC-I (2016)**  
**COMPUTER SCIENCE HSSC-I**  
**SECTION-A (Marks 15)**

**Time allowed: 20 Minutes**

**NOTE:** Section-A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

**Q.1** Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Which of the following is a Non-Impact printer?

A. Dot-matrix      B. Daisy wheel

C. Line printer    D. Laser Printer

(ii) The Internet differentiate one computer from another with the help of:

A. Architecture    B. Manufacturer

C. IP addresses    D. All of these

(iii) Which type of Flat-panel computer screen provides the highest quality image?

A. LCD              B. LED

C. Gas Plasma    D. Both A and B

(iv) All of the following are elements of data communication except:

A. Sender            B. Receiver

C. Medium           D. Voltage

(v) The Layer that is responsible for establishing, maintaining and terminating a user connection is.

A. Presentation    B. Application

C. Transport        D. Session

(vi) Page setup option is present in which menu?

A. Format            B. Insert

C. Edit              D. File

(vii) A connection for similar networks uses:

A. Bridge            B. Gateway

C. Router            D. All of these

(viii) The box which is made with the intersection of row and column is known as:

A. Text Box

B. Combination Box

C. Cell

D. Bar

(ix) Which of the following softwares is used to support Workgroup Computing?

A. Shareware        B. Freeware

C. Groupware        D. Firmware

(x) Which of the following topology uses central device?

A. Bus                B. Star

C. Ring               D. Both A and B

(xi) Internet surfing is an example of:

A. Simplex            B. half duplex

C. Full Duplex        D. None of these

(xii) The step that obtains the next instruction from memory is called:

A. Read                B. Fetch

C. Write               D. Decode

(xiii) Which of the following is faster?

A. Register            B. Cache

C. RAM                D. Hard disk

(xiv) Which of the following techniques uses modulation?

A. Bandwidth        B. Broadband

C. Baseband          D. Both B and C

(xv) The ability of operating system to control the activities of Multiple programs at the same time is called:

A. Multiprocessing

B. Multiprogramming

C. Multitasking

D. All of these

**SECTION - B (Marks 39)**

**Q.2** Answer any THIRTEEN parts. The answer to each part should not exceed 5 to 6 lines. (13 × 3 = 39)

(i) What is Bus? Describe Data Bus and Address Bus

(ii) What are I/O processors? How do they affect CPU's performance?

(iii) Describe Information System Analysis, Design and Implementation phases.

(iv) How are computers useful in Education?

(v) What is Workgroup Computing? Write at least two advantages.

(vi) Describe Dedicated Server Network. How is it different from Peer-to-Peer Network?

(vii) Differentiate between LAN and WAN.

(viii) Define Plotter. Why are plotters used instead of printers?

(ix) What is an OSI Model? List seven layers of OSI Model.

(x) What is Spreadsheet? List at least three areas where it is useful?

(xi) What is purpose of an Operating System? Write key difference between Multitasking and Multiprocessing.

(xii) What is bandwidth? Write difference between baseband and broadband transmission rate.

(xiii) What is Copyright?

(xiv) Differentiate between Impact and Non-Impact printers.

(xv) What is Word Processor? Describe WORD WRAP.

(xvi) What is a VIRUS? How can it damage computer?

(xvii) Define Website and Web Browser.

**SECTION-C (Marks 21)**

**Note:** Attempt any THREE questions. All questions carry equal marks. (3×7=21)

**Q. 3** What is Network Topology? Explain Star and Ring network topologies. (7)

**Q. 4 a.** What is data transmission mode? Explain different types of data transmission modes. (4)

**b.** Describe basic elements of Data Communication System. (3)

**Q. 5 a.** In which layer of OSI model, data Encryption takes place? Explain Transport Layer. (4)

**b.** Explain TCP/IP protocol. (3)

**Q. 6 a** What is Register? Describe Memory Buffer Register and Program Counter Register. (4)

**b.** What is an Instruction Format? Describe Zero-Address Instruction Format. (3)