



Roll No.

Answer Sheet No. _____

Sig. of Candidate. _____

Sig. of Invigilator. _____

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) Devices used for communicating the results of processing such as printer, monitor, etc are known as _____
A. CPU B. Input devices C. Output devices D. Software
- (ii) A set of instructions or statements to be carried out by the computer's CPU to solve a particular problem is known as a/an _____
A. Processor B. Computer Architecture
C. ALU D. Computer Program
- (iii) _____ layer of OSI Model is connected with deciding which physical pathway the data should take, based on network conditions, priority of service, etc.
A. Network B. Data link C. Presentation D. Application
- (iv) Set of rules or agreement between different parts of a network on how data is to be transmitted is called a _____
A. Network Topology B. Communication Protocol
C. Hub D. None of these
- (v) A _____ communication line is capable of transmitting data in only one direction.
A. Duplex B. Half-duplex C. Simplex D. None of these
- (vi) The transmission method in which start and stop bits are not required (before transmission of each character) is called _____
A. Synchronous transmission B. Asynchronous transmission
C. Both A and B D. None of these
- (vii) A mathematical description or model of a real system in the form of a computer program is called _____
A. Printer B. Microwave C. Simulation D. None of these
- (viii) The Circuitry that is used to perform operations such as addition, subtraction, etc inside a computer system is called _____
A. Control Unit B. Registers C. Cache D. ALU
- (ix) The branch of law, which protects creative works from unauthorized use by other people, is known as _____
A. Criminology B. Copyright C. Anthropology D. None of these
- (x) The feature of an operating system that allows a user to work in more than one program simultaneously is called _____
A. Process B. Clipboard C. Desktop D. Multitasking
- (xi) In Microsoft Windows, which shortcut is used to copy an item?
A. Ctrl+C B. Ctrl+V C. Ctrl+E D. Ctrl+X
- (xii) Most websites and web pages on the internet are written using which language?
A. C++ B. COBOL C. BASIC D. HTML
- (xiii) Websites designed to help users search for information on the web are known as _____
A. Chat Rooms B. Search Engines C. Teleconference D. Browser
- (xiv) Maintaining business relationships and selling information and commodities by means of computer telecommunication networks is known as _____
A. E-commerce B. Simulation C. Emulation D. CAD
- (xv) When the second part of an instruction code specifies the address of an operand, the instruction is said to have a/an _____
A. Indirect address B. Direct address
C. Immediate operand D. None of these

For Examiner's use only:

Total Marks:

15

Marks Obtained:

COMPUTER SCIENCE HSSC-I

Time allowed: 2:40 Hours

Total Marks Sections B and C: 60

NOTE:- Answer any thirteen parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 39)

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

- (i) Define "Information Technology". Briefly write about any two forms in which information can be represented.
- (ii) Write a brief description of Local Area Networks.
- (iii) List and briefly describe any three operations for which the Mouse may be easier to use than the keyboard.
- (iv) Define the following terms:
 - a. Memory cell
 - b. Cycle Time (in terms of computer memory)
 - c. Random Access Memory
- (v) Define "Workgroup". Write briefly about any two types of software used in workgroup computing.
- (vi) Briefly write the benefits of using E-mail.
- (vii) What are the basic elements of a Data Communication System?
- (viii) How can computers be useful in Education?
- (ix) What are the benefits of using computers in weather forecasting?
- (x) Define "ROM". List any two types of ROM used in computers.
- (xi) What are Computer Instructions? Briefly explain.
- (xii) Consider the following worksheet from MS-Excel:

	A	B	C	D	E	F	G
1	Name	Basic Pay	Conv. Allc.	Medical Allc.	Gross Pay	Income Tax (5% of Basic Pay)	Net Pay (Gross Pay – Income Tax)
2	Employee A	15000	2400	1500			

Write formula in E2, F2 and G2 to calculate the Gross pay (total pay), Income tax (@ 5% of basic pay) and Net pay, respectively.

- (xiii) Briefly state any three basic rules or conventions for file and folder names in MS-Windows.
- (xiv) A small college is considering to use computers for accounts. Frequent calculation such as making totals, calculating averages, etc are involved in accounting. Which application program would you suggest the college should use to keep accounts data? What would be the benefits of using that application program?
- (xv) Briefly describe any three benefits of Internet.
- (xvi) Qasim lives at a small village and is one of the few educated persons there. People frequently come to him to write applications, letters, etc. Which computer program should Qasim use to write applications etc? What would be the benefits over handwritten applications?
- (xvii) Consider the URL: <http://www.pakistan.gov.pk> Briefly explain each part of the URL.

SECTION – C (Marks 21)

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

- Q. 3 What are Network Topologies? Name and describe any three network topologies with the help of diagrams. 1+2+2+2=7
- Q. 4 Define "Modulation". Name and describe any three forms/methods of modulation with the help of diagrams. 1+2+2+2=7
- Q. 5 Draw a diagram of a microprocessor showing the interconnection between its various components e.g. busses, registers, etc and briefly explain any four parts of it (busses, registers, instruction decoder etc) 3+4=7
- Q. 6 What is a "Computer Virus"? List three ways in which viruses can spread. Also mention three precautionary steps you can take to protect your computer from the threat of viruses. 1+3+3=7