HSSC-I Examination

Computer Science

Time allowed: 2.40 hours

Total Marks: 60

SECTION – B (Marks 18)

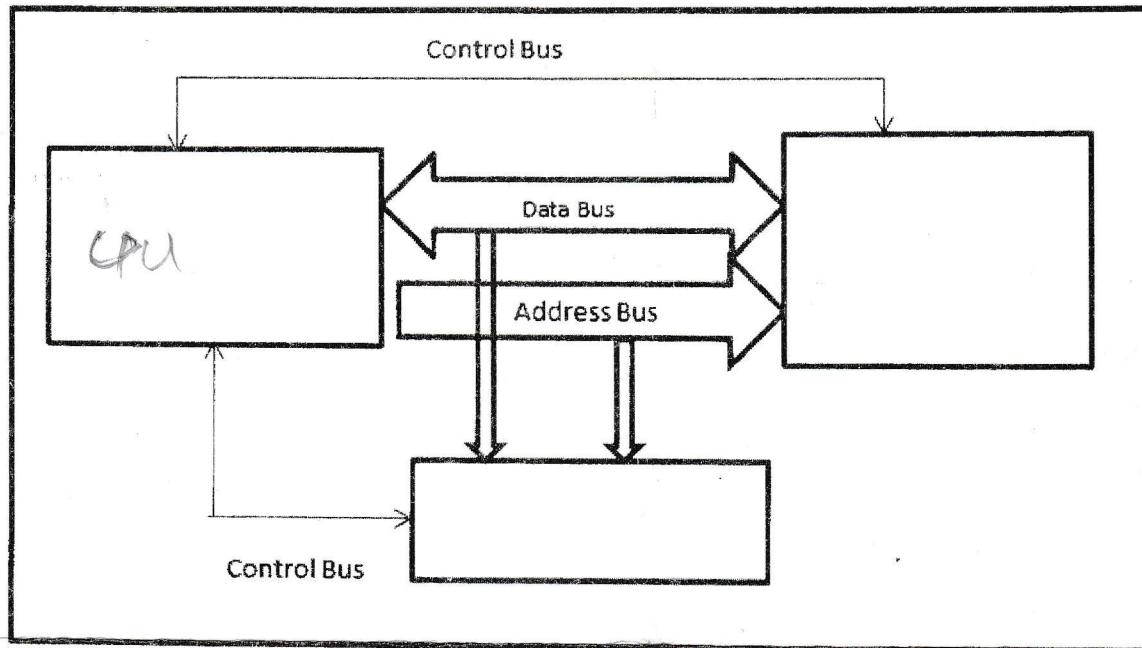Q.2 Attempt any **SIX** parts from the following. All parts carry equal marks.   (6x3 = 18)

i.   What is the function of BIOS in the computer?

ii. Why LED monitors are better choice than LCD monitor? Give three reasons to support your answer.

iii. Why data access time in Sequential Access Devices is more than the Random Access devices?

iv. If cache memory is removed from a computer, what will happen to it?

v.   Answer the following question using the grid box given below:

#	Questions (Select the right grid box number(s) for your answer)	Box No.
a	Identify the machine used for banking transaction facilities.	
b	In which unit Instruction Execution of mini computers can be measured.	
c	Which software translates a program from high level language to machine language?	

GRID BOX

1. BIPS (Billion Instructions Per Seconds)	4 Million Instructions Per Seconds	7 Compiler
2 ATM	5 Trillion Instructions Per Second	8 Interpreter
3 Credit Card	6 Assembly	9 Mnemonics

vi. Define the function of MOV(MOVE), LD(LOAD) and STO (STORE) instructions.

vii. What is the major three disadvantages of RAM?

viii. Write three differences between CISC and RISC Architecture.

ix. Label the following diagram to show communication of system buses.
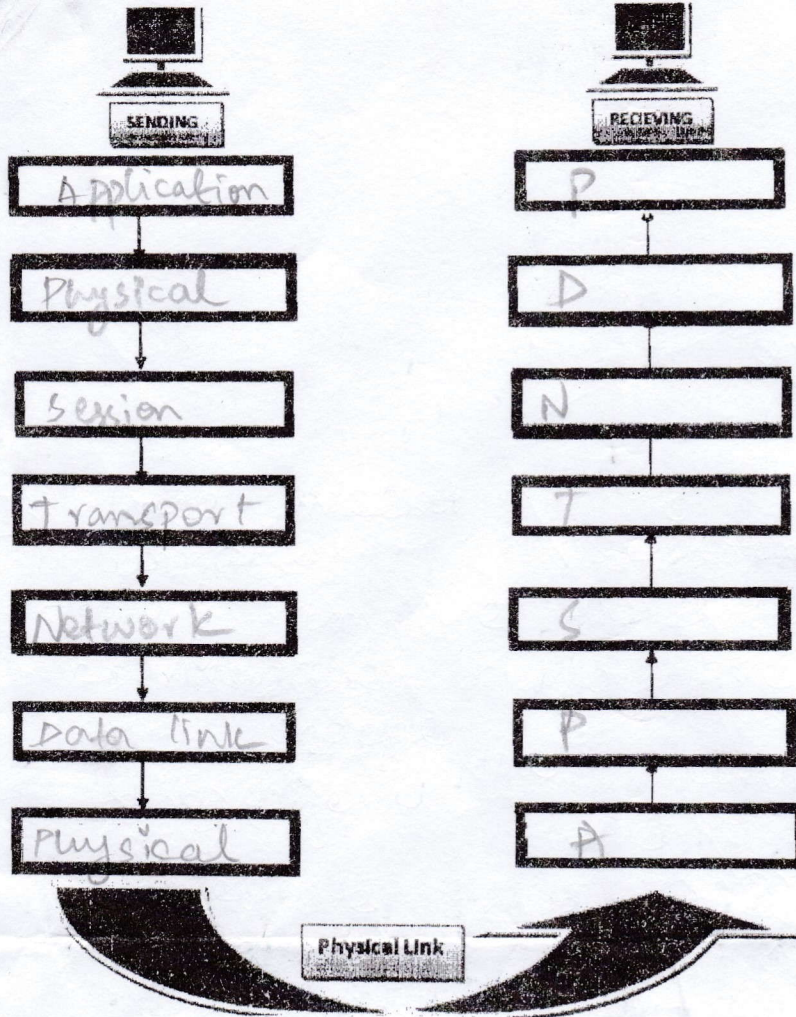
Control Bus

Data Bus

CPU

Address Bus

Control Bus

SECTION – C (Marks 18)

Q.3 Attempt any SIX parts from the following. All parts carry equal marks.   (6x3 = 18)

i.   Write any three common applications of Infra-Red technology in daily life.

ii.   What is the purpose of using network mask?

iii. What is TCP/IP protocol stack?

iv.   Differentiate between circuit switched and packet switched network

v.   Write limitations of star topology.

vi.   Which transmission is faster? Give reason synchronous or asynchronous

vii. Write main differences between Wi-Max and Bluetooth.

viii. Label the different layers, name the following Model:

SENDING

| Application |
| Physical |
| Session |
| Transport |
| Network |
| Data link |
| Physical |

RECEIVING

| P |
| D |
| N |
| T |
| S |
| P |
| A |

Physical Link

ix. Write three limitations of the mobile communication systems.

SECTION – D (Marks 24)

Note: Attempt any **THREE** questions. All questions carry equal marks. (3x8 = 24)

Q.4 Describe the following types of system software: (8)

i. Operating System ii. Device Drivers iii. Utility software iv. Language Processors

Q.5 Define Internal Processor Memory. Explain different types of internal processor memories used in computers. Show types of cache using diagram. (1+5+2)

Q.6 Explain different types of instruction formats with examples.   (8)

Q.7 Explain the components that are required to achieve mobile communication. (8)