

**NTK/KW/15 –5988**

**First Semester B. Sc. (IT) Examination**

**Paper - I**

**FUNDAMENTALS OF INFORMATION  
TECHNOLOGY**

Time : Three Hours ]

[ Max. Marks : 50

- N. B. : (1) All questions are compulsory and carry equal marks.  
(2) Draw neat and labelled diagram wherever necessary.

**EITHER**

1. (A) Explain functions of various component of a computer with diagram. 5
- (B) What are the valid digits in hexadecimal number system ? Do as directed:
  - (i)  $(10767)_{10} = (?)_{16}$
  - (ii)  $(39)_{10} = (?)_2$  5

**OR**

- (C) What is HLL ? Write characteristics of a good HLL programming language. 5
  - (D) What is Translator ? Differentiate source program and object program. 5
2. (A) What is secondary memory ? Explain Blu-ray disk in detail. 5

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Contd.

- (B) What is the role of ROM in computer system?  
Differentiate between S-RAM and D-RAM. 5

**OR**

- (C) What is a hard disk ? Explain working principle  
of harddisk. 5
- (D) What is main memory ? Explain different types  
of memories. 5

Write short notes on

- (i) PROM.
- (ii) EEPROM. 5

**EITHER**

3. (A) Explain light pen and touch screen. 5
- (B) Explain working of laser printer. 5

**OR**

- (C) Write short note on :—
- (i) MICR.
- (ii) OMR.
- (D) What is scanner? Explain various types of scanner

**EITHER**

4. (A) What is MODEM ?
- Write short notes on :
- (i) Bridge.
- (ii) Gateway.

What is Bluetooth and wi-fi network? Explain

**OR**

(C) What do you understand by network architecture?

Explain :—

(i) Peer to peer.

(ii) Client server architecture. 5

(D) What is network topology ? Explain linear and circular topologies. 5

5. Answer any **ten** :—

(i) What is interpreter ?

(ii) List four types of number system.

(iii) Write full form of cycles  $IC = FC + EC$

(iv) Define cache memory.

(v) Flash memory will stop working approximately after how many read write cycle ?

(vi) What is optical disk.

(vii) Name the device through which voice input can be given to the computer.

(viii) For what plotter is used ?

(ix) For what purpose Bar code reader is used

(x) What is infrared device ?

(xi) Define Router

(xii) Give full form of LAN, WAN, MAN, GAN.

10X1