NTK/KW/15/5950

Bachelor of Computer Applications (B.C.A.)
Semester–I Examination
COMPUTER FUNDAMENTALS
Paper—I

Time—Three Hours]   [Maximum Marks—50

    N.B. :— All questions are compulsory carry equal.

EITHER

1. (A) Explain Primary Memory in detail.   5

    (B) Perform the following using 2's complement method :

        (i) $48 - (-23)$

        (ii) $28 - 17.$ 5

    OR

    (C) Convert the following as per instruction :

        (i) $(0.687)_{10} = (?)_8$

        (ii) $(6327.4051)_8 = (?)_{10}$

        (iii) $(11101)_2 = (?)_8$

        (iv) $(A72E)_{16} = (?)_8$

        (v) $(2F9A)_{16} = (?)_2$ 5

    (D) Write notes on the following :

        (i)   Interpreter

        (ii) Compiler.   5

EITHER

2. (A) Differentiate Static and Dynamic Memory. 5

(B) Explain different types of Primary Memory. 5

OR

(C) Explain how data is stored and accessed in optical disk. 5

(D) Write note on :

(i) Blue ray

(ii) Pen Drive. 5

EITHER

3. (A) Discuss in detail working of Laser Printer with the help of suitable diagram. 5

(B) Explain the laser beam technology used in bar code reader. 5

OR

(C) Write application of Light Pen, Touch Screen, Voice Input in different Commercial areas. 5

(D) Write notes on :

(i) MICR

(ii) OCR. 5

EITHER

4. (A) What are different types of network ? Explain use of each type of network. 5

(B) Explain Linear and Tree topology. 5

OR

(C) Write application of wi-fi network in detail. 5

(D) What are different network protocols ? Discuss in detail. 5

5. Solve (Any **Ten**) :

(i) What is Instruction Format ?

(ii) What is sequential access storage device ?

(iii) Define Latency.

(iv) What is Seek Time ?

(v) How storage capacity of hard disk is calculated ?

(vi) Write the names of sequential and random storage devices.

(vii) Why WAN is called as Long Haul network ?

(viii) Define Topology.

(ix) What is the full form of wi-fi ?

(x) What is IP Address ?

(xi) Write one difference to differentiate Compiler and Interpreter. 1×10=10