March – April 2022

Post Graduate Diploma in Computer Applications (PGDCA) Examination

I Semester

FUNDAMENTALS OF COMPUTER

Time 3 Hours]   [Max. Marks 100

Note : Attempt any two parts of each question. Each question carries equal marks.

1. (a) Explain with diagram Von-Numan Model of Computer, describing each component with examples.

    (b) Explain different types of Primary Memory used in Computers with examples and applications.

    (c) Categorize and explain types of Secondary Memory with their applications.

2. (a) Explain Time Line of Historical Development of different generations computers with their advantages and disadvantages.

    (b) Explain different types of Computers w. r. t. size, speed, portability, features and characteristics and compare them.

    (c) Explain different RAID Levels with diagram.

3. (a) Elaborate with examples and diagram different types of Input Devices used in Computer System.

    (b) Explain with diagram different types of Output Devices used with Computer System.

    (c) Categorize different types of Impact and Non-Impact Printers with examples and applications.

4. (a) Compare and explain the difference between System Software and Application Software with examples.

    (b) Elaborate different types of Languages (lower / middle / higher) Levels with examples.

    (c) Discuss the difference between :
         (i)   Compiler, Interpreter and Assembler.
         (ii) Linker and Loader (with their types).

5. (a) Explain different types of Number Systems used in Computers. (with examples)
    (b) Elaborate different types of Coding System used in Computers. (with examples)
    (c) Convert the following :
         (i) $(27FB)_{16} = (\ldots\ldots\ldots)_{10}$
         (ii) $(54673)_8 = (\ldots\ldots\ldots)_2$
         (iii) $(10110110101)_2 = (\ldots\ldots\ldots)_{16}$
         (iv) $(10110010101)_2 = (\ldots\ldots\ldots)_8$
         (v) $(423)_{10} = (\ldots\ldots\ldots)_{16}$