DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER-2020

COMPUTER HARDWARE AND NETWORKING
(COMMON FOR EL, AE, EP, EC, TC and EA)

[Maximum marks: 100]   (Time: 3 Hours)

PART – A
[Maximum marks: 10]
(Answer all questions in one or two sentences. Each question carries 2 marks)

I. (1). List the four interfacing methods of mouse to PC.

(2). Outline the role of South bridge in motherboard.

(3). Define the term seek time related to hard disk.

(4). Define star topology.

(5). List any two unguided transmission media.   (5 x 2 = 10)

PART – B
[Maximum marks: 30]
(Answer any *five* of the following questions. Each question carries 6 marks)

II. (1). Draw and list the pin details of VGA monitor.

(2). List the output voltage levels with corresponding colour codes of an ATX SMPS.

(3). Distinguish between L1 cache and L2 cache.

(4). Compare features of SIMM and DIMM.

(5). State the features of windows OS.

(6). State the need for formatting of hard disk. Explain the various types.

(7). List any six applications of Bluetooth technology.   (5 x 6= 30)

PART – C
[Maximum marks: 60]
(Answer one full question from each unit. Each question carries 15 marks)

UNIT –I

III. (a). Outline the matrix keyboard organization.   (7)

(b). Draw the block diagram and explain the working principle of ATX SMPS.   (8)

OR

IV. (a). Explain the working of dot matrix printer. (7)

    (b). Compare flatbed scanner and handheld scanner based on working principle. (8)

UNIT-II

V. (a). State the expansion slots in a motherboard. Describe the functions of each. (9)

    (b). Compare different microprocessor based on years of design, coprocessors, speed, address

      lines, data lines, address space. (6)

OR

VI. (a). Describe the block schematic of ATX motherboard organization and explain each

      block in detail. (9)

    (b). Describe the role of BIOS and POST in a PC system. (6)

UNIT-III

VII.(a). With the help of diagram explain the constructional details of hard disk. (9)

    (b). Compare CD, CDR, CDRW and DVD. (6)

OR

VIII. (a). Illustrate the principle of optical recording. (8)

    (b). Summarize the steps involved in Windows installation in PC. (7)

UNIT-IV

IX. (a). Illustrate ISO-OSI reference model starting function of each layer. (10)

    (b). Write short notes on (i). Router. (ii). Bridge. (5)

OR

X. (a). With necessary diagrams, explain wireless LAN architecture. (8)

    (b). Describe the working of Network Interface Card. (7)

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