বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

BCA

1st Semester Examination 2021

COMPUTER FUMDAMENTAL

PAPER—1101

Full Marks : 70

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group – A

Answer any *four* questions.   4×15

1. (a) What is pseudocode ? What are the characteristics of an alogorithm ?

   (b) Write the pseudocode to check a number is a palindrome or not.

   (c) What are the limitations of flowchart ?   (2+5)+5+3

2. (a) Define the term 'seek time' and 'latency time' of a hard disk. Define random access time.   2+2+2

     (b) What are the differences between data and information ?   3

     (c) Draw and explain the basic structure of CPU.   6

3. (a) Find the value of x : $(1101011)_2 = (?)_8$ 3

     (b) Prove that if $w'x + yz' = 0$ then

$$wx + y'(w' + z') = wx + xz + x'z' + w'y'z$$ 5

     (c) Implement X-OR gate with the help of minimum number of NAND gate and NOR gate seperately.   7

4. (a) What is operating system ? Explain memory hierarchy.   2+5

     (b) Why do we need computer memory ?   2

     (c) What is Cache memory ?   3

     (d) What are the advantages of cache memory ?   3

5. (a) Distinguish between Primary and Secondary memory.   3

     (b) What are the differences between ROM and RAM ?   3

     (c) Explain the term EEPROM.   4

     (d) Explain Virtual memory.   5

6. (a) What do you mean by fixed and floating point number representations ?

6

(b) Briefly describe different types of memory access methods with example.

6

(c) What are the attributes in HTML ?

3

7. (a) What are the basic differences between Internet and Intranet ?

4

(b) What is web browser ?

2

(c) Explain the structure of HTML.

4

(d) Explain briefly about forms in HTML.

5

8. (a) How to create a hyperlink in HTML ?

4

(b) Name some common lists that are used when designing a page.

5

(c) Discuss the function and structure of e-mail protocol.

6

Group – B

Answer any *one* question.

1×10

9. (a) What do you mean by multiprogramming and multitasking ?

2+2

(b) What is the differences between high level language and machine level language ?

2

(c) What do you mean by floating point representation of a number ? Explain with a suitable example.

2+2

10. (a) Briefly dfescribe the Von-Neuman architecture of Computer. 4

(b) What are the characteristics of 4th and 5th generation of Computer ?

3+3

(Internal Assessment : 30)

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