2021
(Held in 2022)

COMPUTER FUNDAMENTALS AND ICT HARDWARE

Paper : BCA–HC–1026

Full Marks : 60

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following with the given correct options : 1×5=5

   (a) Laser printer is a type of

   (i) impact printer

   (ii) non-impact printer ✓

   (iii) Both of the above

   (iv) None of the above

   (b) DVD stands for

   (i) Digital Video Disk

   (ii) Digital Versatile Disk ✓

   (iii) Direct Versatile Disk

   (iv) Dual Versatile Disk

Contd.

(c) SMPS means

   (i) System Management Powerpoint Software

   (ii) Synchronous Mode Power Supply

   (iii) Switched Mode Power Supply ✓

   (iv) Sequential Mode Power Supply

(d) HDD stands for

   (i) High Definition Disk

   (ii) High Density Disk

   (iii) Hard Disk Drive ✓

   (iv) None of the above

(e) USB means

   (i) Uneven System Bios

   (ii) Unique System Bus

   (iii) Uniform Serial Bus

   (iv) Universal Serial Bus ✓

2. Answer **any five** questions from the following : 2×5=10

   (a) What Algorithm ? Name its graphical implementation.

   (b) Differentiate between impact-printer and non-impact printer.

   (c) Why do we need to perform the defragmentation of the Hard disk ?

(d) Write *any two* differences between CD and DVD.

(e) What is virtual memory and what is the main benefit of using it ?

(f) Write *any two* functions performed by BIOS. https://www.assampapers.com

3. Answer **any five** of the following questions : 3×5=15

(a) What is Pseudo code ? Write *one each* of its advantage and disadvantage.

(b) Differentiate between Complier and Interpreter. (Write *any three* points)

(c) "NTFS has several improvements over FAT-32 file system"— Justify your answer.

(d) What do you mean by Driver Installation in a PC ? Describe briefly.

(e) Briefly explain the different types of RAM.

(f) How is Co-axial cable different from Twisted-pair cable. (Write *any three* points)

4. Answer **any four** questions from the following : 5×4=20

(a) What are the technological and architectural differences between 1st, 2nd, 3rd and 4th generation of computers ?

(b) Draw the block diagram of a Digital Computers and briefly describe all its major components.

(c) Briefly describe the following two Hard disk tools :
   (i) Disk clean-up
   (ii) Scanning for virus

(d) What is cache memory ? Briefly explain its operation of working with the help of a block diagram.

(e) How many bytes does each class of IP address use to represent Network IDs and Host IDs ?

5. Answer only **one** question from the following : 10×1=10

(a) Explain the classification of computer according to their functionality with example of each.

(b) Explain the theory of operation (working principle) of CDROM drive with a neat block diagram.

(c) Write short notes with diagram : *(any two)* 5×2=10
   (i) SMPS
   (ii) Network Interface Card
   (iii) Network Cabling and its types.

2021

(Held in 2022)

INTRODUCTION TO C PROGRAMMING

Paper : BCA-HC-1016

Full Marks : 80/60

Time : Three hours

The figures in the margin indicate full marks for the questions.

For CBCS students **only two** questions are to be answered from Q. No. **6.**

1. Write the following terms with suitable example. (any **five**) 2×5=10

   (a) Syntax of declaring and accessing elements of an array.

   (b) Function definition, function call and function prototype.

   (c) Pointer Declaration and Definition.

   (d) Syntax of for loop.

   (e) Syntax of structure definition and accessing structure variable through data operator.

   (f) Opening and closing a file.

2. Differentiate the following with suitable example : 2×5=10

   (a) While and do-while loop.

   (b) Call by reference and call by value.

   (c) Recursive and non-recursive functions.

   (d) Arrays and structures.

   (e) Binary file and Text file.

3. What will be the output of the following program segment ? (Assuming no syntax error) 2×5=10

   (a) If $x = 3$, $y = 0$ and $z = -4$, what is the value of the following expression ?

   (i) $x \&\& y \| z$

   (ii) $x \| y \&\& z$

   (b) for (int $x = 1$; $x <= 20$; $x++$)
   printf ("%d/$_n$ ", x);

   (c) for (int $x = 1$; $x <= 20$; $x++$)
   {
       for (int $y = 1$; $y <= 5$; $y++$)
         printf ("%d", x);
       printf ("/$_n$");
   }

(d) Given the following declaration :

```
int a = 5 ;
int b = 7 ;
int + p = & a ;
int + q = & b ;
```

what is the value of each of the following expression ?

(i)　　+ + a　　　(ii)　　+ + (∗p)

(e) for (int x = 12 ; x < 7 ; x − −)

　　　printf ("%/$_n$", X) ;

4. Answer the following : *(any three)* 4×3=12

(a) What do you mean by two dimensional array ? State some situations that can easily be represented by these.

(b) Distinguish between variables and keywords. https://www.assampapers.com

(c) Write a program in C to generate factorial of a number.

(d) What do you mean by precedence of operators in C ? Explain with example.

5. Print out the errors, if any in the following C statements. Also give proper justification.

　　　　　　　　　　　　　　1×8=8

(a) int x = 10 ;

(b) printf (a) ;

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2021

(Held in 2022)

OFFICE AUTOMATION

Paper : BCA-HG-1026

Full Marks : 60

Time : Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any six** questions.*

1.   2×5=10

(a) What do you mean by print preview ?

(b) Write *two* features of Word Processing.

(c) What do you mean by header and footer in MS Word ?

(d) Write *two* DTP packages.

(e) What do you mean by alignment in MS Office ?

2. (a) What are the basic advantages of Spreadsheet ?   5

(b) What are the basic importance of PowerPoint presentation ?   5

3. Explain with an example, how to create slides, add clip art and other pictures and inserting animation in PowerPoint.   10

4. How to create bar and column diagram in MS Excel ? Explain with an example.   10

5. What are the basic uses of menu bar, title bar, status bar and toolbars ? What do you mean by portable document format ?   7+3=10

6. How to create a table in MS Word ? Explain with a simple example.   10

7. Write the basic advantages of DTP software. What do you mean by mail merge ?   5+5=10

8. Write short notes on : 5+5=10

(a) Formatting features in MS Word.

(b) Sum and average function in MS Excel with example.

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