COMPUTER APPLICATION

(BET - 104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions.

The figures in the right-hand margin indicate marks.

1. (*a*) What do you mean by compiler ? 2

   (*b*) Make a comparative study between first and second generation computer. 5

   (*c*) Describe the function of different parts of computer with a neat block diagram of computer. 7

2. (*a*) State and difference between analog and digital computer. 2

   (*b*) Give a brief idea about different types of network. 5

   (*c*) Describe the characteristics of different types of memories used in a computer. 7

3. (*a*) What is a system software ? 2

(*b*) Make a comparative study between DOS and WINDOWS. 5

(*c*) What is a computer virus ? How does a virus spread and what are the symptoms of virus attack ? How can you prevent virus attacks ? 7

4. (*a*) What is protocol ? 2

(*b*) Explain the different types of network devices. 5

(*c*) Write an algorithm and draw a flow chart to convert temperature from degree Celsius to Farenheit. 7

5. (*a*) What are the four basic data types available in C language ? 2

(*b*) State the features of different file accessing methods. 5

(*c*) Discuss about the various application areas of internet. 7

6. (*a*) What is pointer ? 2

(*b*) What is E-mail ? Explain the features of E-mail. 5

(*c*) Write a program in C find the sum of odd numbers between 1 to 100. 7

7. (*a*) What is www ? 2

(*b*) Write short notes on printer. 5

(*c*) What are built-in functions ? Give some example of these functions. 7

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II/SEM/COMMON/2018 (W)/
NEW

COMPUTER APPLICATION

(BET - 104)

Full Marks : 80

Time : 3 hours

Answer any five questions including Q.Nos. 1 & 2.

The figures in the right-hand margin indicate marks.

1. Answer the following : 2 × 10

   (*a*) Write four output devices.

   (*b*) Define line printer.

   (*c*) Define GUI.

   (*d*) What are four major resources of a computer which are managed by the operating system ?

   (*e*) Define computer network.

   (*f*) What do you mean by function in C programming language ?

   (*g*) Name four internet service providers in India.

(*h*) Define data capture.

(*i*) Define escape sequence character constant. Give two examples.

(*j*) Define protocol.

2. Answer any *five* questions : 6 × 5

(*a*) Draw a flow chart to find the sum of first *n* natural numbers.

(*b*) Write a program in C to find whether a number is prime or not.

(*c*) Write the difference between compiler and interpreter.

(*d*) Define data processing and explain various method of data processing.

(*e*) Write on different mode of data transmission based on direction of data flow.

(*f*) Explain the main features of the various types of memory present at different levels of memory hierarchy.

(*g*) Give an account of classification of computers based on how they work.

3. Draw a flow chart and write a program in C to get the factorial of a given number. 10

4. Discuss about the generation of computers. Explain the key features of computers of each generation. 10

5. Discuss about various types of operating system used in computer. 10

6. What do you mean by Network topologies ? Write on major types of network topologies. 10

7. Write short notes on (any *two*) : 5 × 2

(*a*) Features of windows operating system

(*b*) How to detect virus ?

(*c*) Central Processing Unit (CPU).

II—Sem/COMMON/2018(S)
(Old)

COMPUTER APPLICATION

(Theory – 4)

Full Marks : 80

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) Name the basic components used in 1st and 2nd generation of computer. 2

(*b*) Define computer architecture. Explain briefly the classification of computers. 6

(*c*) Identify the functional unit of a computer system. Draw a functional line diagram and describe the working of each unit. 8

2. (*a*) Define software. 2

(*b*) Differentiate between system software and application software. Write the different software available. 6

(*c*) Why memory is needed ? Explain different types of memory. 8

3. (*a*) Write two DOS commands. 2

(*b*) What is computer virus ? Explain types of computer virus and explain the techniques to prevent it. 6

(*c*) Write the function of operating system. Explain different types of operating system. 8

4. (*a*) What is the function of compiler ? 2

(*b*) Define flow chart. Draw a flow chart to find the largest of 3 numbers. 6

(*c*) Define internet. Explain the use of internet in different domain areas. 8

5. (*a*) Write two types of internet connectivity. 2

(*b*) Define E-mail. Write the message format of E-mail and write the advantages of E-mail. 6

(*c*) Write a program in C to compute the following series :

$$S = 1 + 2 + 3 + 4 + \ldots\ldots\ldots + 100$$

Draw a flowchart for the same. 8

6. (*a*) Name two output devices. 2

(*b*) Write the syntax of loop structures i.e. for, while, do statement. 6

(*c*) Write a program in C to find the factorial of N. 8

7. (*a*) Define algorithm. 2

(*b*) Write the syntax of switch statement in C. Give one example. 6

(*c*) Define 'Array' in C. Write a program to store 10 number of marks in an array named MARK. 8

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II—Sem/COMMON/2017 (S)
(Old)

COMPUTER APPLICATION

(Theory—4)

Full Marks : 80

Time : 3 hours

Answer any five questions

Figures in the right-hand margin indicate marks

1. (*a*) What is cache memory ? 2

   (*b*) Describe the von Neumann Architecture of computer. 6

   (*c*) Describe different types of memory and their classification. 8

2. (*a*) What is Compiler ? 2

   (*b*) Describe the different functions of operating system. 6

(*c*) Describe the different types of operating system. 8

Or

What is computer virus ? Describe the detection and prevention of computer virus.

3. (*a*) What is an Internet ? 2

(*b*) Describe the different types of Networking Topology. 6

(*c*) Write down the application of Internet in different domain. 8

4. (*a*) What is an Algorithm ? 2

(*b*) Draw the different symbol of flowchart. 6

(*c*) Write the pseudocode and flowchart to solve the problem that converts the temperature from fahrenheit to centigrade. 8

5. (*a*) Write down the various data types used in 'C' - programming language. 2

(*b*) What are the different decision making statements used in 'C' programming language ? 6

(*c*) Write a program in 'C' to find out the greatest among three numbers. 8

6. (*a*) Write the difference between = and = = operators in C-programming language. 2

(*b*) What are the different string functions used in 'C'-programming language with suitable example ? 6

(*c*) Write a program in 'C' to find out the factorial of a given number. 8

7. (*a*) What is an array ? 2

(*b*) Describe the difference between structure and union with C-program syntax. 6

(*c*) Write a program to reverse a string of characters using an array. 8

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Total Pages—3

I—Sem/COMMON/2017(W) (New) (Ex-Reg)

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70

Time : 3 hours

Answer any five questions

Figures in the right-hand margin indicate marks

1. (*a*) What is EPROM ? 2

   (*b*) Discuss about different functions of OS. 5

   (*c*) Draw the functional block diagram of computer and explain the flow of data in it. 7

2. (*a*) State the difference between Application and System Software. 2

   (*b*) Explain the need of different types of memory in a computer and its function. 5

   (*c*) Discuss about multiprogramming and batch processing OS. 7

3. (*a*) Define serial transmission. 2

   (*b*) Explain synchronous and asynchronous data transmission mode. 5

   (*c*) Define topology. Explain different types of topology. 7

4. (*a*) Define FTP. 2

   (*b*) Discuss about different advantages of internet. 5

   (*c*) Discuss about different types of Internet Connectivity. 7

5. (*a*) What is Data validation ? 2

   (*b*) Write an algorithm and draw the flowchart to find whether a number is prime or not. 5

   (*c*) What is file access ? Explain the various types of file access method. 7

6. (*a*) What is a C token ? 2

   (*b*) Differentiate between do-while and while statement. 5

   (*c*) Write a C program to calculate the sum of the series : 7

$$S = X^{-3} + x^{-6} + x^{-9} \ldots + x^{-n}$$

7. (*a*) Define a array. 2

   (*b*) Distinguish between Compiler and Interpreter. 5

   (*c*) Write a C program to add the elements of an array. 7

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II—Sem/COMMON/2017(W)
(New)

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) What is the function of ALU ? 2

(*b*) Explain the features of 3rd and 4th generation computers. 5

(*c*) Describe the classification of different types of computer. 7

2. (*a*) Name any two antivirus software. 2

(*b*) Write the difference between RAM and ROM. 5

(*c*) Define operating system. Discuss various types of operating system used in computer. 7

3. (*a*) What do you mean by recursion ? 2

(*b*) What is loop ? Write the syntax of three types of loop. 5

(*c*) Write a C program to find out whether a number is odd or even and also draw its flowchart. 7

4. (*a*) Define algorithm. 2

(*b*) What is virus ? Describe different types of virus that are encountered in computers. 5

(*c*) Define internet. Explain different advantages of internet in various application areas. 7

5. (*a*) Define pointer. 2

(*b*) Differentiate between compiler and interpreter. 5

(*c*) Define network. Explain different types of network. 7

6. (*a*) What is Topology ? 2

(*b*) Give a comparison between DOS and WINDOWS. 5

(*c*) What is file ? Explain the various types of file access method. 7

7. (*a*) What do you mean by www ? 2

(*b*) Define software. Explain different types of software with examples. 5

(*c*) What do you mean by function in 'C' language ? Explain call by value and call by reference with examples. 7

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II—Sem/COMMON/2017(S)
(New)

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks.

1. (*a*) What is BIOS ? 2

   (*b*) Discuss about the different types of computer software. 5

   (*c*) State and explain about four major functions of OS. 7

2. (*a*) What is Cache Memory ? 2

   (*b*) Discuss about primary memory of a computer. 5

   (*c*) Define track and sector of a hard disk. A hard disk has 10 disk plates, 2000 tracks per surface and 125 sectors per track and 512

bytes of data can be stored per sectors. Calculate the storage capacity. Draw a diagram of the structure of hard disk. 7

3. (*a*) Name any two anti virus software. 2

(*b*) Give a brief idea about different types of Network. 5

(*c*) Discuss about different types of connecting media in a network. 7

4. (*a*) Define type conversion in 'C'. 2

(*b*) Write an algorithm and draw the flowchart to find the greatest of four numbers. 5

(*c*) Discuss about different types of operators in C. 7

5. (*a*) Define topology. 2

(*b*) Explain e-mail message format. 5

(*c*) State and explain the various type of file access methods. 7

6. (*a*) Define string. 2

(*b*) Write a C program to reverse a string. 5

(*c*) Discuss about call by value and call by reference. 7

7. (*a*) Define pointer. 2

(*b*) Discuss about 'Dangling else problem". How it can be avoided ? 5

(*c*) Write a program to enter a [3] × [3] matrix and display diagonal of the matrix. 7

II—Sem/COMMON/2016 (S)
(New)

COMPUTER APPLICATION

(Code—BET-104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) Define operating system. 2

   (*b*) Give a brief idea about the classification of computers. 5

   (*c*) What is computer virus and what are its different types ? How it can be detected and prevented ? 7

2. (*a*) Define Compiler and interpreter. 2

   (*b*) What do you mean by Software ? Differentiate between System Software and Application Software. 5

(*c*) What is the use of memory in a computer ? Give a clear description about its classification. 7

3. (*a*) Define network and internet. 2

(*b*) Briefly explain the uses of bridge and router in network. 5

(*c*) What is a file ? Describe the file access methods : sequential, Direct and ISAM. 7

4. (*a*) What do you mean by type-casting in 'C' ? 2

(*b*) What is pseudocode and why it is used ? 5

(*c*) Draw the flowchart and write a program in 'C' to calculate the factorial of a number. 7

5. (*a*) What are different data types used in 'C' ? 2

(*b*) Differentiate between call by value and call by reference. 5

(*c*) Give a comparison study of DOS, Windows and Unix operating system. 7

6. (*a*) What is FTP and why it is used ? 2

(*b*) Write short notes on (any *two*) : 5

(*i*) E-mail

(*ii*) On-line shopping

(*iii*) Chatting.

(*c*) Write a program in 'C' to multiply two 3 × 3 matrices. 7

7. (*a*) What is a Pointer in 'C' ? 2

(*b*) What do you mean by String ? Write a program in 'C' to concatenate two strings. 5

(*c*) What is looping ? What are the different types of looping used in 'C' ? Write their systems with examples. 7

II—Sem/COMMON/2016(S) (New)(BP)

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) List out the main blocks of a computer system. 2

(*b*) Define virus. Write down how to detect and prevent the virus. 5

(*c*) Why memory is needed ? Explain different types of memory. 7

2. (*a*) Define algorithm. 2

(*b*) Differentiate between compiler and interpreter. 5

(*c*) What is file ? Discuss different file access and storage methods. 7

3. (*a*) Define router. 2

(*b*) What is operating system ? Explain batch processing and time sharing operating system. 5

(*c*) Define network. Explain different types of network. 7

4. (*a*) What do you mean by pointer ? 2

(*b*) Discuss different generation of computer. 5

(*c*) Define topology. Explain different types of topology used in networking. 7

5. (*a*) Define protocol. 2

(*b*) Explain different operators used in 'C' language. 5

(*c*) Write a C program to find out largest among three numbers with flowchart. 7

6. (*a*) What do you mean by FTP ? 2

(*b*) Write a C program to find out factorial of a given number. 5

(*c*) Discuss different network devices in detail. 7

7. Write short notes on any *four* : $3\frac{1}{2} \times 4$

(*i*) Software

(*ii*) Array

(*iii*) E-mail

(*iv*) Looping statement in C language

(*v*) Online shoping

(*vi*) Flowchart.

II–Sem/COMMON/2015(S)
(Old)

COMPUTER APPLICATION

(Theory – 4)

Full Marks : 80

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) Define GUI. 2

(*b*) Explain the features of 3rd and 4th generation of computers. 6

(*c*) Discuss about the various types of operating system used in computer. 8

2. (*a*) Write down equivalent *C* expression for $\frac{b^3 - 2ab}{4abc}$. 2

(*b*) How does star topology differ from ring topology ? 6

(Turn Over)

(*c*) Define Memory. Give the characteristics of different types of memory of a computer system. 8

3. (*a*) Define GFLOPs. 2

(*b*) Give an example of recursion function. 6

(*c*) Discuss about various categories of computer network. 8

4. (*a*) What is ternary operator ? 2

(*b*) Write the features of multiprogramming and time-sharing operating system. 6

(*c*) Draw a flowchart and write a program in C to add all the digits of a given number *n*. 8

5. (*a*) Define Pseudocode. 2

(*b*) Write an algorithm to add 1 to 10 natural numbers. 6

(*c*) Draw a flowchart and write a program in C to display all the prime numbers in between 10 to 100. 8

6. (*a*) What are the four basic data types available in 'C' language ? 2

(*b*) Explain how data is recorded on a floppy disk and CD-ROM ? 6

(*c*) What is Network topology ? Explain different topologies. 8

7. (*a*) What is Protocol ? 2

(*b*) Explain the different types of Network devices. 6

(*c*) Draw a flowchart and write a program in C using while loop that sums the series given as

$$x + x^2 + x^3 + \cdots\cdots + x^n.$$ 8

II—Sem/COMMON/2015(S) (New)

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70

Time : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) What is Cache Memory ? 2

(*b*) What is memory hierarchy ? Explain the main features of the various types of memory present at different levels of this hierarchy. 5

(*c*) What is classification of computer ? Compare and contrast the different features of different classes of computer. 7

2. (*a*) What is OMR ? 2

(*b*) Outline the key features of different generations of computer. 5

(*Turn Over*)

(*c*) Explain the working of a digital computer with a functional block diagram. 7

3. (*a*) State the feature of time sharing operating system. 2

(*b*) Define Operating System. Discuss about major functions of operating system. 5

(*c*) Discuss about various types of software. Distinguish between Compiler and Interpreter. 7

4. (*a*) What is a modem ? 2

(*b*) Write about the function of different internetworking devices. 5

(*c*) Explain different advantages of Internet in various application areas. 7

5. (*a*) What is Data Processing ? 2

(*b*) State the features of different file accessing methods. 5

(*c*) Write a program in C to print the reverse of a string by using an array. 7

6. (*a*) What are built-in functions ? Give some example of these functions. 2

(*b*) What is Loop ? Write the syntax of three types of loop. 5

(*c*) Write a program in C to print the series. 7

1 1 2 3 5 8 13 21 34 55

7. (*a*) Differentiate between = and == operator. 2

(*b*) Write a program in C to print all two digit odd numbers. 5

(*c*) Write short notes on any *two* : $3\frac{1}{2} \times 2$

(*i*) e-mail

(*ii*) Function in C

(*iii*) Network Topology

(*iv*) Window OS.

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 80 *Time* : 3 hours

Answer any **five** questions including **Q. Nos. 1 & 2**

Figures in the right-hand margin indicate marks

1. Answer *all* questions : 2 × 10

   (*a*) Define MIPS.

   (*b*) Give two examples each from 1st and 2nd generation of computers.

   (*c*) What do you mean by resolution of a printer ?

   (*d*) Define RAM.

   (*e*) Write about escape sequence character constant with examples ?

   (*f*) What is the use of device driver ?

   (*g*) Compare between file and folder ?

   (*h*) Define protocol with examples.

   (*i*) How string is represented in an array ?

   (*j*) What are the reserved words in C programming language ? Give four examples.

2. Answer any *six* questions : 5 × 6

   (*a*) Write a program in C to add all the odd numbers in between 10 to 30 natural numbers ?

   (*b*) Draw a flow chart to multiply 10 random numbers.

   (*c*) Write on different data transmission mode refering to direction of dataflow.

   (*d*) Compare between 1st and 2nd generation of computer.

   (*e*) Define software. Write on different types of software used in computers.

   (*f*) What is data processing ? Give an account of different modes of data processing.

   (*g*) Discuss about different types of internet connectivity.

3. Define topology. Describe on types of topologies exist to form a network. 10

4. Draw a block diagram of digital computer and describe the functions of each part. 10

5. Write a program in C and draw a flow chart that accepts any number and prints the number of digits in that number. 10

6. Define operating system ? Discuss about various types of OS. 10

7. Write short notes on : 10

(*i*) Optical disk

(*ii*) Router

(*iii*) Primary memory

(*iv*) e-mail.

COMPUTER APPLICATION

(Theory : 1(B))

Full Marks : 80 *Time* : 3 hours

Answer any **five** questions including **Q.Nos.1 & 2**

Figures in the right-hand margin indicate marks

1. Answer the following in brief : 2 × 10

(*a*) Define ternary operator ?
(*b*) What is CPS and MIPS ?
(*c*) Differentiate between impact and non-impact printer ?
(*d*) Define algorithm ?
(*e*) What do you mean by volatile memory ?
(*f*) Differentiate between softcopy and hardcopy.
(*g*) What do you understand by device driver software ?
(*h*) What are the goals of the network ?
(*i*) How file is different from folder ?
(*j*) Define NULL statement and NULL character constant.

2. Answer any *five* questions : 6 × 5

(*a*) Differentiate between primary and secondary memory ?
(*b*) Give a detailed note on different output devices ?
(*c*) How is compiler different from interpreter ?
(*d*) Draw a flow chart to add all the odd numbers in 10 random numbers ?
(*e*) Write a short note on the different types of area networks ?
(*f*) Write on various types of data processing method ?

3. Define memory. Give the details of various types of memory present in a computer system. 10

4. Write on different types of networking devices used to form a network in details. 10

5. Draw a flow chart and write a program in C to print all prime numbers in 05 random numbers. 10

6. Compare the various features of DOS, Windows and unix operating system. 10

7. Write short notes on the following (any *two*) : 5 × 2

(*i*) Full duplex data transmission mode
(*ii*) e-mail
(*iii*) STAR topology.

COMPUTER APPLICATION

(Code : BET-104)

Full Marks : 70 *Time* : 3 hours

Answer any **five** questions

Figures in the right-hand margin indicate marks

1. (*a*) Define structure. 2
   (*b*) Compare between application software and system software. 5
   (*c*) Discuss about various types of data transmission mode on the basis of direction of data flow. 7

2. (*a*) What do you understand by non-volatile memory. Give two examples. 2
   (*b*) Discuss about different types of computers based on how they work. 5
   (*c*) Give an account of various generation of computers. 7

3. (*a*) Define algorithm. 2
   (*b*) What is file ? Distinguish between direct access and sequential access method. 5
   (*c*) Draw a flow chart and write a program in C to calculate summation of all digits of a given number. 7

4. (*a*) How software is different from hardware ? 2
   (*b*) Write on various types of area networks. 5
   (*c*) Discuss on different types of memory in memory hierarchy system. 7

5. (*a*) What is internet ? 2
   (*b*) Compare between compiler and interpreter. 5
   (*c*) Define operating system. Write about functions of OS. 7

6. (*a*) Define CPU. 2
   (*b*) What are the various types of data processing method ? Explain briefly. 5
   (*c*) Give a comparative statement on features of DOS and Unix operating system. 7

7. (*a*) Define virus. Give two example of antivirus softwares. 2
   (*b*) Write the format of e-mail. 5
   (*c*) Write on various types of networking devices used to form a network. 7

II SEM/COMMON/2019(W)/(New)

TH- 1 (b)-COMPUTER APPLICATION

Full Marks : 80 Time : 3 hours

Answer any Five Questions including Q No. 1 & 2
Figures in the right hand margin indicates marks

1.	Answer ALL the Questions: (a) What is super computer? (b) What do you mean by MICR? (c) Define BIOS. (d) Define topology. (e) What is Internet? (f) Define Algorithm. (g) Explain daisy wheel printer. (h) Define variable and constant in C program. (i) What is recursive function? (j) Define an Array.	2 x 10
2.	Answer any SIX Questions : (a) Briefly explain the different generation of computer . (b) Differentiate between impact printer and non-impact printer . (c) Explain about RAM and ROM . (d) Distinguish between Compiler and Interpreter. (e) Explain simplex, half duplex and full duplex modes of data transmission. (f) Explain different types of area network. (g) Define File. Explain different file accessing methods.	5 x 6
3.	Write down the function of operating system. Explain different types of operating system.	10
4.	What is computer memory? Briefly describe the memory hierarchy.	10
5.	Draw a flowchart and write a program in C to calculate the sum of the first 10 natural numbers.	10
6.	Define call by value and call by reference with sample C program.	10
7.	Write short note on: (a) Repeater. (b) NIC. (c) E-mail. (d) Chatting.	10