

DAY - **16**

SEAT NUMBER

--	--	--	--	--	--

2017

III

20

1100

**V – 234**

(E)

**COMPUTER SCIENCE  
PAPER - I (D-9)**

**Time : 3 Hours**

**4 Pages**

**Max. Marks : 50**

- Instructions :**
- (1) All questions are compulsory.
  - (2) Figure to the right indicate full mark.
  - (3) Use of any type of calculator not allowed.
  - (4) Draw a neat diagram wherever necessary.

1. (A) Select correct option from the following and rewrite sentence :
- (a) The time lost in turning the attention of processor from one process to another is called as \_\_\_\_\_. 1
- (i) Circuit Switching
  - (ii) Band Width
  - (iii) Context Switching
  - (iv) Packet Switching
- (b) A record is collection of \_\_\_\_\_. 1
- (i) Files
  - (ii) Arrays
  - (iii) Fields
  - (iv) Maps
- (c) If all visibility labels are missing then by default members of class are \_\_\_\_\_. 1
- (i) Public
  - (ii) Protected
  - (iii) Private
  - (iv) Void



- (d) \_\_\_\_\_ tag is used to put a line break in HTML Code. 1
- (i) <HR>
  - (ii) <BR>
  - (iii) <P>
  - (iv) <LI>
- (B) Answer **any two** of the following :
- (a) What is Friend Function ? Write any four characteristics of Friend Function. 3
  - (b) Explain in short the three special characteristic of a static data member in a class. 3
  - (c) Discuss Virus Detection, Virus Removal and Prevention Philosophies. 3
2. (A) Answer **any two** of the following :
- (a) Explain with flowchart the following control structure : 3
    - (i) Sequence Logic
    - (ii) Selection Logic
    - (iii) Iteration Logic
  - (b) Explain Bubble Sort Algorithm with suitable example. 3
  - (c) What functions are performed by Memory Management of Operating System ? State any four Memory Management System. 3
- (B) Answer **any one** of the following :
- (a) What is Operator Function ? Describe the syntax of an Operator Function. Explain the difference between Operator Function as the Member Function and Friend Function. 4
  - (b) With reference to process management. Explain the terms : 4
    - (i) External Priority
    - (ii) Purchased Priority
    - (iii) Internal Priority
    - (iv) Time Slice
3. (A) Answer **any two** of the following :
- (a) Write difference between Linear Search and Binary Search. 3
  - (b) Explain different types of inheritance with suitable diagram. 3
  - (c) How linked list are represented in Memory ? 3



(B) Answer **any one** of the following :

(a) Define the following terms with reference to Tree :

4

(i) Root

(ii) Leaf

(iii) Sibling

(iv) Depth

(b) What is Computer Virus ? What are the different method by which virus can infect other programs ?

4

4. (A) Answer **any two** of the following :

(a) With syntax diagram explain structure of HTML WebPage.

3

(b) Explain the concept of function overloading with example.

3

(c) Explain any three features of Windows-NT Operating System.

3

(B) Answer **any one** of the following :

(a) State the various steps involved in the allocation of partition in case of fixed partition memory management.

4

(b) Explain the use of Scope resolution Operator and Memory Management Operators in C++ with examples.

4

5. Solve **any two** of the following :

(a) Write a program in C++ to read a set of 10 numbers from keyboard and findout largest number in the given array.

5

(b) Write a program in C++ to find factorial of entered number.

5

(c) Write a code in HTML for following table :

5

	Paper I	Paper II	Total
Computer Science	100	100	200

OR



5. Solve any two :

- (a) Implement class GCD which have member function (a/c), which calculate greatest common divisor of two number entered during program execution. Print() will Print GCD of two number. 5
- (b) Write a C++ program to display a series of 15 term of the Fibonacci Series. 5
- (c) Write the exact output of the following HTML Code with font specification in bracket. 5

```
<html>
<title> Introduction </title>
<body>
<h1> <b> Computer Science </b> </h1>
<hr>
<u> Paper-I </u>
<hr>
<u> Paper-II </u>
</body>
</html/>
```



# EXAM SOLUTION

Complete solution for your exam needs



DAY - 18

SEAT NUMBER

--	--	--	--	--	--

2017

III

22

1100

V – 268

(E)

**COMPUTER SCIENCE  
PAPER - II (D-9)**

**Time : 3 Hours**

**4 Pages**

**Max. Marks : 50**

- Instructions :**
- (1) All questions are compulsory.
  - (2) Figures to the right indicate full marks.
  - (3) Draw neat diagrams wherever necessary.
  - (4) Use of any type of calculator is not allowed.
  - (5) Comments are must in Assembly Language Programs.

1. (A) Select correct options and rewrite the following :

(a) The flag register of 8085 microprocessor contains \_\_\_\_\_ flags. 1

(i) 8

(ii) 3

(iii) 7

(iv) 5

(b) ANA, r instruction comes under \_\_\_\_\_ group. 1

(i) Arithmetic

(ii) Logical

(iii) Branch

(iv) Data Transfer

(c) The maximum physical memory can be addressed by 80286 microprocessor is \_\_\_\_\_ 1

(i) 640 KB

(ii) 1 MB

(iii) 16 MB

(iv) 4 KB



(d) \_\_\_\_\_ cable uses light signals to transmit data. 1

(i) Fiber Optic

(ii) Coaxial

(iii) UTP

(iv) STP

(B) Solve **any two** of the following :

(a) Explain functions of the following pins of 8085 Microprocessor : 3

(i) Multiplexed address/data bus pin (AD0 - AD7)

(ii) RST 6.5

(iii) CLK (OUT)

(b) Write the addressing mode and length in bytes of the following instructions : 3

(i) CPI 10 H

(ii) MOV M, B

(iii) SHLD C009 H

(c) Compare any three characteristics of Twisted Pair Cable with Coaxial Cable. 3

2. (A) Solve **any two** of the following :

(a) Define the following terms with suitable diagrams : 3

(i) T State

(ii) Machine Cycle

(iii) Instruction Cycle

(b) What is Wireless Media ? Write any two advantages of Wireless Media. 3

(c) The accumulator in 8085 microprocessor contains data 71H and register E contains data 39H. What will be the contents of an accumulator in Hexadecimal after execution of the following instructions independently ? 3

(i) ADD E

(ii) ORA E

(iii) RRC



- (B) Solve **any one** of the following :
- What is Microcontroller ? State any three advanced features of 8052 microcontroller over 8051 microcontroller. 4
  - What is Vectored Interrupt ? State all hardware interrupts with their vectored addresses, write the priorities of hardware interrupts. 4
3. (A) Solve **any two** of the following :
- Write any three difference points between Memory Mapped I/O and I/O Mapped I/O Addressing Scheme. 3
  - Explain the following instructions of 8085 Microprocessor with one example of each : 3
    - PUSH PSW
    - INX rp
    - DAD rp
  - Write a short note on Modem. 3
- (B) Solve **any one** of the following :
- Write any two features of following Microcontrollers : 4
    - 8048
    - 8052
    - 8031
    - 8050
  - What is Ethernet ? Discuss different types of Ethernet. 4
4. (A) Solve **any two** of the following :
- Compare any three attributes of 80386 and 80486 Microprocessor. 3
  - Write any three instructions to make Accumulator Zero. 3
  - What is Microprocessor ? List its functions. 3
- (B) Solve **any one** of the following :
- Write a function of following functional units of 8085 Microprocessor : 4
    - Instruction Decoder
    - General Purpose Register
    - Data / Address Buffer
    - Status Register
  - What is Transmission Media ? Explain in short six characteristics of Transmission Media. 4



5. Solve **any two** of the following :

- (a) Write an Assembly Language Program to copy a block of data having starting address 4500 H to new location starting from 4600 H. The length of block is stored at memory location 44FF H. 5
- (b) Write an Assembly Language Program to add two 8-bits BCD numbers stored at memory location 4500 H and 4501 H. Store the two byte BCD result from memory location 4502 H onwards. 5
- (c) Write an Assembly Language Program to fill the memory locations 4500H to 4504 with the Hexadecimal numbers 09 H to 0DH respectively. 5

**OR**

5. Solve **any two** of the following :

- (a) Write an Assembly Language Program to exchange the nibbles of 8-bit number stored in memory location 4500H. Store the result at memory location 4501H. 5
- (b) A block of data is stored in memory location 4500 H. The length of block is stored in memory location 44FFH. Write an Assembly Language Program that searches for the first occurrence of data D9H in given block. Store the address of this occurrence in H.L. pair. If the number is not found then HL pair should contain 5000 H. 5
- (C) A block of data is stored from memory location 4501H and onwards. The length of the block is stored at memory location 4500H. Write an Assembly Language Program to find the sum of block of data. Store the two byte result from memory location 4600 H. 5

**EXAM SOLUTION**

Complete solution for your exam needs