11th COMPUTER SCIENCE

VOLUME-I [UNIT I & II]

CHAPTER 1 - 8
[COMPLETE BOOK BACK ONE MARKS]

UNIT I –FUNDAMENTALS OF COMPUTER AND WORKING WITH A TYPICAL OPERATING SYSTEMS (WINDOWS & LINUX)

CHAPTER – 1

INTRODUCTION TO COMPUTER

1. First generation computers used

(a) Vacuum tubes (b) Transistors (c) Integrated circuits (d) Microprocessors

2. Name the volatile memory

(a) ROM (b) PROM **(c) RAM** (d) EPROM

3. Identify the output device

(a) Keyboard (b) Memory **(c) Monitor** (d) Mouse

4. Identify the input device

(a) Printer **(b) Mouse** (c) Plotter (d) Projector

5. …… Output device is used for printing building plan, flex board, etc.

(a) Thermal printer **(b) Plotter** (c) Dot matrix (d) inkjet printer

6. In ATM machines, which one of the following is used to

(a) Touch Screen (b) speaker (c) Monitor (d) Printer

7. When a system restarts …… ….. which type of booting is used.

(a) Warm booting (b) Cold booting (c) Touch boot (d) Real boot.

8. Expand POST

(a) Post on self Test (b) Power on Software Test **c) Power On Self Test** (d) Power on Self Text

9. Which one of the following is the main memory?

(a) ROM **(b) RAM** (c) Flash drive (d) Hard disk

10. Which generation of computer used IC's?

(a) First (b) Second **(c) Third** (d) Fourth

CHAPTER - 2

NUMBER SYSTEM

Part - I

1. Which refers to the number of bits processed by a computer's CPU?

A) Byte B) Nibble **C) Word length** D) Bit

2. How many bytes does 1 Kilo Byte contain?

A) 1000 B) 8 C) 4 **D) 1024**

3. Expansion for ASCII

A) American School Code for Information Interchange

B) American Standard Code for Information Interchange

C) All Standard Code for Information Interchange

D) American Society Code for Information Interchange

4. 2^50 is referred as

A) Kilo B) Tera **C) Peta** D) Zetta

5. How many characters can be handled in Binary Coded Decimal System?

A) 64 B) 255 C) 256 D) 128

6. For 11012 what is the Hexadecimal equivalent?

A) F B) E **C) D** D) B

7. What is the 1's complement of 00100110?

A) 00100110 **B) 11011001** C) 11010001 D) 00101001

8. Which amongst this is not an Octal number?

A) 645 B) 234 **C) 876** D) 123

Part - II

1. Which is a basic electronic circuit which operates on one or more signals?

(A) Boolean algebra **(B) Gate** (C) Fundamental gates (D) Derived gates

2. Which gate is called as the logical inverter?

(A) AND (B) OR **(C) NOT** (D) XNOR

3. A + A = ?

(A) A (B) O (C) 1 (D) A

4. NOR is a combination of ?

(A) NOT(OR) (B)NOT(AND) (C) NOT(NOT) (D) NOT(NOR)

5. NAND is called as …… Gate

(A) Fundamental Gate **(B) Derived Gate** (C) Logical Gate (D) Electronic gate

CHAPTER – 3

COMPUTER ORGANIZATION

1. Which of the following is sadi to be the brain of a computer?

(a) Input devices (b) Output devices **(c) Memory device** (d) Microprocessor

2. Which of the following is not the part of a microprocessor unit?

(a) ALU (b) Control unit **(c) Cache memory** (d) register

3. How many bits constitute a word?

(a) 8 (b) 16 (c) 32 **(d) determined by the processor used.**

4. Which of the following device identifies the location when address is placed in the memory address register?

(a) Locator (b) encoder **(c) decoder** (d) multiplexer

5. Which of the following is a CISC processor?

(a) Intel P6 (b) AMD K6 **(c) Pentium III** (d) Pentium IV

6. Which is the fastest memory?

(a) Hard disk (b) Main memory **(c) Cache memory** (d) Blue-Ray dist

7. How many memory locations are identified by a processor with 8 bits address bus at a time?

(a) 28 **(b) 1024** (c) 256 (d) 8000

8. What is the capacity of 12cm diameter DVD with single sided and single layer?

(a) 4.7 GB (b) 5.5 GB (c) 7.8GB (d) 2.2 GB

9. What is the smallest size of data represented in a CD?

(a) blocks (b) sectors **(c) pits** (d) tracks

10. Display devices are connected to the computer through.

(a) USB port (b) Ps/2 port (c) SCSI port **(d) VGA connector**

CHAPTER – 4

THEORETICAL CONCEPTS OF OPERATING SYSTEM

1) Operating system is a

A) Application Software B) Hardware **C) System Software** D) Component

2) Identify the usage of Operating Systems

A) Easy interaction between the human and computer

B) Controlling input & output Devices

C) Managing use of main memory

D) All the above

3) Which of the following is not a function of an Operating System?

A) Process Management B) Memory Management

C) Security management **D) Complier Environment**

4) Which of the following OS is a commercially licensed Operating system?

A) Windows B) UBUNTU C) FEDORA D) REDHAT

5) Which of the following Operating systems support Mobile Devices?

A) Windows 7 B) Linux C) BOSS **D) iOS**

6) File Management manages

A) Files B) Folders C) Directory systems **D) All the Above**

7) Interactive Operating System provides

A) Graphics User Interface (GUI) B) Data Distribution

C) Security Management D) Real Time Processing

8) Android is a

A) Mobile Operating system B) Open Source

C) Developed by Google **D) All the above**

9) Which of the following refers to Android operating system's version?

A) JELLY BEAN B) UBUNTU C) OS/2 D) MITTIKA

CHAPTER – 5

WORKING WITH TYPICAL OPERATING SYSTEMS

1. From the options given below, choose the operations managed by the operating system.

a. Memory b. Processor c. I/O devices **d. all of the above**

2. Which is the default folder for many Windows Applications to save your file?

a. My Document b. My Pictures c. Documents and Settings d. My Computer

3. Under which of the following OS, the option Shift + Delete – permanently deletes a file or folder?

a. Windows 7 b.Windows 8 c.Windows10 **d. All of the OS**

4. What is the meaning of "Hibernate" in Windows XP/Windows 7?

a. Restart the Computer in safe mode

b. Restart the Computer in hibernate mode

c. Shutdown the Computer terminating all the running applications

d. Shutdown the Computer without closing the running applications

5. Which of the following OS is not based on Linux?

a. Ubuntu b. Redhat c. CentOs **d. BSD**

6. Which of the following in Ubuntu OS is used to view the options for the devices installed?

a. Settings b. Files c. Dash d. VBox_GAs_5.2.2

7. Identify the default email client in Ubuntu.

a. Thunderbird b. Firefox c. Internet Explorer d. Chrome

8. Which is the default application for spreadsheets in Ubuntu? This is available in the software launcher.

a. LibreOffice Writer **b. LibreOffice Calc**

c. LibreOffice Impress d. LibreOffice Spreadsheet

9. Which is the default browser for Ubuntu?

a. Firefox b. Internet Explorer c. Chrome d. Thunderbird

10. Where will you select the option to log out, suspend, restart, or shut down from the desktop of Ubuntu OS?

a. Session Indicator b. Launcher c. Files d. Search

UNIT II ALGORITHMIC PROBLEM SOLVING

CHAPTER 6

SPECIFICATION AND ABSTRACTION

1. Which of the following activities is algorithmic in nature?

(a) Assemble a bicycle. (b) Describe a bicycle.

(c) Label the parts of a bicycle. (d) Explain how a bicycle works.

2. Which of the following activities is not algorithmic in nature?

(a) Multiply two numbers. (b) Draw a kolam.

(c) Walk in the park. **(d) Braid the hair.**

3. Omitting details inessential to the task and representing only the essential features of the task is known as

(a) specification **(b) abstraction** (c) composition (d) decomposition

4. Stating the input property and the as :-output relation a problem is known

(a) specification (b) statement (c) algorithm (d) definition

5. Ensuring the input-output relation is

(a) the responsibility of the algorithm and the right of the user.

(b) the responsibility of the user and the right of the algorithm.

(c) the responsibility of the algorithm but not the right of the user.

(d) the responsibility of both the user and the algorithm.

6. If i = 5 before the assignment i := i-1 after the assignment, the value of i is

(a) 5 **(b) 4** (c) 3 (d) 2

7. If 0 < i before the assignment i := i-1 after the assignment, we can conclude that

(a) 0 < i **(b) 0 ≤ i** (c) i = 0 (d) 0 ≥i

CHAPTER 7

COMPOSITION AND DECOMPOSITION

1. Suppose u, v = 10 ,5 before the assignment. What are the values of u and v after the sequence of assignments?

```
1  u := v
2  v := u
```

(a) u, v = 5 ,5 (b) u, v = 5 ,10 (c) u, v = 10 ,5 (d) u, v = 10 ,10

2. Which of the following properties is true after the assignment (at line 3?

```
1 -- i+j = 0
2 i, j := i+1, j-1
3 -- ?
```

(a) i+j >0 (b) i+j < 0 **(c) i+j =0** (d) i = j

3. If C1 is false and C2 is true, the compound statement

```
1   if C1
2    S1
3   else
4      if C2
5         S2
6      else
7         S3
```

Executes

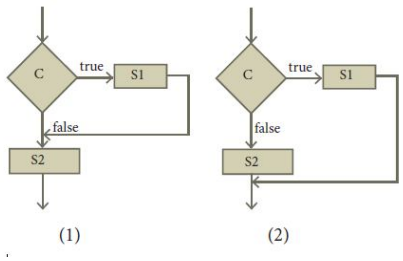
(a) S1 **(b) S2** (c) S3 (d) none

4. If C is false just before the loop, the control flows through

```
1   S1
2    while C
3       S2
4    S3
```

(a) S1 ; S3 (b) S1 ; S2 ; S3 (c)S1 ; S2 ; S2 ; S3 (d) S1 ; S2 ; S2 ; S2 ; S3

5. If C is true, S1 is executed in both the flowcharts, but S2 is executed in



(a) (1) only (b) (2) only (c) both (1) and (2) **(d) neither (1) nor (2)**

6. How many times the loop is iterated?

```
i := 0
  while i ≠ 5
        i := i + 1
```

(a) 4 **(b) 5** (c) 6 (d) 0

CHAPTER 8

ITERATION AND RECURSION

1. A loop invariant need not be true

   (a) at the start of the loop. (b) at the start of each iteration
   (c) at the end of each iteration **(d) at the start of the algorithm**

2. We wish to cover a chessboard with ▭▭ dominoes, the number of black squares and the number of white squares covered by dominoes, respectively, placing a domino can be modeled by

   (a) b := b + 2 (b) w := w + 2 (c) b, w := b+1, w+1 **(d) b := w**

3. If m x a + n x b is an invariant for the assignment a, b : = a + 8, b + 7, the values of m and n are

   (a) m = 8, n = 7 **(b) m = 7, n = -8** (c) m = 7, n = 8 (d) m = 8, n = -7

4. Which of the following is not an invariant of the assignment?
   m, n := m+2, n+3

   (a) m mod 2 (b) n mod 3 (c) 3 X m - 2 X n **(d) 2 X m - 3 X n**

5. If Fibonacci number is defined recursively as

$$F(n)=\begin{cases}0 & n=0\\ 1 & n=1\\ F(n-1)+F(n-2) & \text{otherwise}\end{cases}$$

   to evaluate F(4), how many times F() is applied?

   (a) 3 (b) 4 (c) 8 (d) 9

6. Using this recursive definition

$$a^n=\begin{cases}1 & \text{if } n=0\\ a \times a^{n-1} & \text{otherwise}\end{cases}$$

   how many multiplications are needed to calculate a10?

   (a) 11 (b) 10 **(c) 9** d) 8

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*****ALL THE BEST*****