MODEL QUARTERLY EXAM QUESTION PAPER 2019-2020

Grade: 11   **Timed allowed: 2.30 hrs.**
Sub: Computer science   **Maximum marks: 70**

SECTION-A

I Choose the best answer   **15X1=15**

1. Which component is used in the second generation computer?
   a) Vacuum tube   b) Transistor   c) Integrated Circuit   d) Microprocessor
2. Which one of the following coding system is integrated with Unicode?
   a) BCD   b) ASCII   c) EBCDIC   d) ISCII
3. Match the following
   a) CDROM   -   1. 4.7 GB
   b) DVD   -   2. 500 GB
   c) Flash memory -   3. 700 MB
   d) Blu ray disc -   4. 2 TB
   a) 3214   b) 3142   c) 4123   d) 1234
4. Which of the following was developed by Google
   a) Android TV   b) Android Auto   c) Android wear   d) All of these
5. Which icon in windows 10 is same as 'My computer' in windows 8?
   a) Pc   b) My Pc   c) This Pc   d) Computer
6. Which icon is clicked to see disk drives mounted in windows 7?
   a) Computer   b) My computer   c) Drive icon   d) Device driver
7. The default application in Ubuntu similar to MS-Excel in window is
   a) Spread sheet   b) Libre office suite   c) Open office calc   d) Star office calc
8. If i:=7 before the assignment, i=i*2. The value of I after the assignment is
   a) 2   b) 7   c) 14   d) 49
9. What are the values of variables m and n after the assignment in line 1 and line 3
   1. m,n:=120,150
   2. - - m n:=? ?
   3. m,n:=m+3,n-1
   4. - - m.n:= ? ?
   a) 123 and 153   b) 123 and 149   c) 153 and 119   d) 120 and 150
10. Which refers to the software in which the source code is available for free
    a) Source   b) Source code   c) Open source   d) Anytime source
11. Expanding each sub-program into more detailed step is known as
    a) Composition   b) Decomposition   c) Abstraction   d) Refinement

12. A condition in a flowchart is represented by a shape like

    a) Diamond   b) Rectangle   c) Circle   d) Oval

13. Given U,V:=U+3, V+3, Which of the following is invariant?

    a) U-V   b) UV   c) U+V   d) U/V

14. Which one of the following is the elementary problem-solving techniques?

    a) Refinement   b) Decomposition   c) Flowchart   d) Algorithm

15. Using this recursive definition

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

  how many multiplications are needed to calculate a^{10} ?

    a) 8   b) 9   c) 7   d) 10

SECTION-B

II. Answer any six question no. 19 is compulsory   6X2=12

16. Expand   a) BIOS   b) ENIAC   c) RAM   d) ALU
17. Give ASCII codes for the characters A and Z?
18. Write note on AND gate.
19. What is GUI?
20. What are the two types of windows available in windows XP?
21. Distinguish between a condition and a statement.
22. What is a launcher in Ubuntu?
23. Distinguish between an algorithm and a process.
24. Define Refinement.

SECTION-C

III. Answer any six question no. 29 is compulsory   6X3=18

25. Write the sequence of steps n boot process.
26. Find 2's complement of a) -22   b) -35
27. Write briefly about Blu-ray disc.
28. Write a note on mobile operating system.
29. What are the different operating systems used in computer?
30. Differentiate Thunderbird and Firefox in Ubuntu OS.
31. Write the specification algorithm hypotenuse whose inputs are the lengths of the two shorter sides of a right angled triangle, and the output is the length of the third side.
32. Draw a flowchart for 3 case analysis using alternative statements.
33. Define factorial of a natural number recursively.

SECTION-D

IV. Answer the following questions in detail.   **5X5=25**

34. Explain the basic components of a computer with a neat diagram.

(or)

Explain the following

a) Inkjet Printer   b) Multimedia projector   c) Barcode/QR code

35. a) Write the procedure to convert fractional Decimal to Binary

b) Convert $(98.46)_{10}$ to binary

(or)

Explain the fundamental gates with expression and truth table.

36. Explain about the secondary storage devices.

(or)

Explain the process management algorithms in operating system.

37. Explain the versions of Windows operating system.
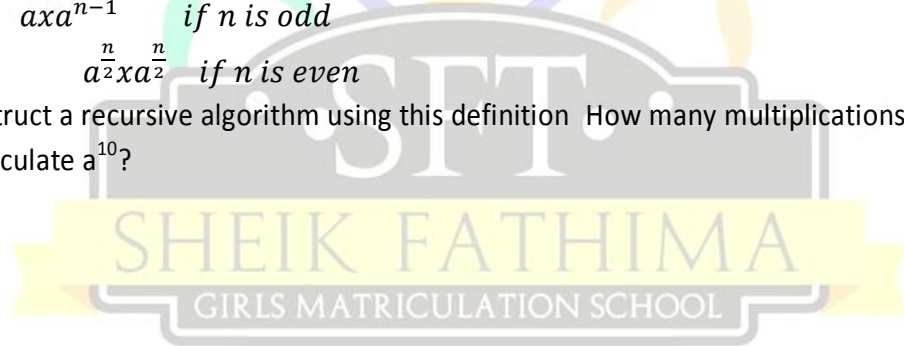
(or)

Explain control flow statements.

38. Briefly discuss Refinement.

(or)

Power can also be defined recursively as

$$a^n = \begin{cases} 1 & if\ n = 0 \\ a x a^{n-1} & if\ n\ is\ odd \\ a^{\frac{n}{2}} x a^{\frac{n}{2}} & if\ n\ is\ even \end{cases}$$

Construct a recursive algorithm using this definition How many multiplications are needed to calculate a^{10}?

Prepared by Ms.M.Surendra B.Sc.,M.E.,

Computer Science Teacher

S.F.T.G.Hr.Sec.School,

Aranthangi-614 616.