NAGAPATTINAM DISTRICT – COMMON EXAMINATIONS
QUARTERLY EXAMINATION – SEP’ 2009
CLASS : XI MARKS:150
COMPUTER SCIENCE

PART- A

Answer all the questions 75x1=75

1. ________ is the first known calculating machine used for counting
   a) Computer  b) Abacus  c) Napier’s Bone  d) The Slide Rule

2. The Slide Rule was invented by
   a) John Napier  b) Blaise Pascal  c) William Oughtred  d) Charles Babbage

3. High level languages were being developed during the ______ generation of computer.
   a) First  b) Second  c) Third  d) Fourth

4. ________ is a step-by-step procedure or formula for solving problem.
   a) Algorithm  b) Data  c) Information  d) None of these

5. ________ allows the user to enter the program and data and send it to the
   processing unit.
   a) Input Device  b) Processor  c) Memory  d) Output Device

6. Software can be classified into ______ categories
   a) Five  b) Four  c) Three  d) Two

7. The ______ software translates the source program into an object program
   a) Operating System  b) Assembler  c) Compiler  d) All of these

8. ________ is an example for Spreadsheet
   a) MS-Word  b) MS-Excel  c) ORACLE  d) Wordstar

9. ________ computer is a computing device that works on continuous range of values
   a) Analog  b) Digital  c) Hybrid  d) Personal

10. The digital computers are classified into ______ different types.
    a) Five  b) Four  c) Three  d) Two

11. ________ computer process billions of instructions per second
    a) Super  b) Mainframe  c) Mini  d) Micro

12. CAD stands for
    a) Computer Assisted Diagram  b) Computer Aided Diagram
    c) Computer Aided Design  d) Computer Assisted Design

13. ________ computers are also called as notebook computers.
    a) Super  b) Personal  c) Desktop  d) Laptop

14. Fifth generation computers based on ______
    a) Transistors  b) Artificial Intelligence
    c) Microprocessor  d) Integrated circuits

15. ________ is used for storing, retrieval and manipulation of information
    a) DBMS  b) Spreadsheet  c) Word processor  d) Compiler

16. Bits have only ________ possible values
    a) two  b) three  c) four  d) five

17. ASCII Stands for
    a) American Standard Code for Information Interchange
    b) American School Code for Information Interchange
    c) American Short Code for International Information
    d) American Science Code for International Interchange

18. In binary system, one kilo byte represents ______ bytes
    a) 512  b) 1024  c) 2048  d) 8

19. A hexadecimal number is represented using base ______
    a) 2  b) 8  c) 10  d) 16

20. 100 + 1 = ?
    a) 111  b) 101  c) 110  d) 011

21. 1000-101=?
    a) 0011  b) 1100  c) 1001  d)1101

22. The ______ operator has one input and one output.
    a) AND  b) OR  c) NOT  d) All of these
23. A . A = _____
   a) A  b) 0  c) 1  d) A

24. A + 0 = _____
   a) A  b) 0  c) 1  d) A

25. A(B + C) = ______
   a) AB + BC  b) AC + BC  c) BC + BA  d) AB + AC

26. F_{16} = ?_{10}
   a) 12  b) 13  c) 14  d) 15

27. Binary equivalent of 25_{10} is
   a) 11001  b) 10011  c) 11011  d) 1001

28. A + 1 = _____
   a) A  b) 0  c) 1  d) A

29. In _____ operator, the output is true only if all the inputs are true.
   a) AND  b) OR  c) NOT  d) All of these

30. The _____ is the combination of NOT and AND
    a) AND  b) OR  c) NOT  d) XOR

31. Based on operation the functional units of Computer can be classified in to _____ parts
    a) two  b) three  c) four  d) five

32. ALU Stands for
    a) Analysis Logical Unit  b) Algorithm Logic Unit  c) Algebraic Logic Unit  d) Arithmetic Logic Unit

33. _____ unit controls the activities of the computer system.
    a) Control  b) Registers  c) ALU  d) Memory

34. Which one is called the primary memory?
    a) Read only memory  b) Random Access Memory  c) PROM  d) None of these

35. One byte equals _____ number of bits
    a) 8  b) 16  c) 32  d) 64

36. Which memory is faster than all other memory?
    a) RAM  b) CACHE  c) Secondary Storage Devices  d) Registers

37. _____ allows information such as an image or text to be input to a computer
    a) Keyboard  b) Mouse  c) Scanner  d) Printer

38. Example for input device
    a) Keyboard  b) Light pen  c) Touch Screen  d) All of these

39. OMR Stands for
    a) Optical Mark Reader  b) Optical Mark Recognition  c) Optical Magnet Reader  d) Optical Magnet Recognition

40. _____ capture the voice data and input to the computer
    a) Microphone  b) Light pen  c) Scanner  d) Touch Screen

41. There are ___ main types of printers
    a) Two  b) Three  c) Four  d) Five

42. _____ printer is example for non impact printers
    a) Dot matrix  b) Line  c) Laser  d) All of these

43. Dot matrix printer can print _____ characters per second
    a) 3000  b)3600  c) 300  d) 360

44. Storage capacity of 3.5\" Floppy Disk
    a) 1 GB  b) 1.9MB  c) 512 MB  d) None of these

45. The smallest dot that can be displayed on the screen is called
    a) Pixel  b) height ratio  c) track  d) none of these

46. Hard disks rotates at _____ rpm
    a) 300  b) 3600  c) 3000  d)360

47. The monitors have width to height ratio is
    a) 3:4  b) 4:3  c) 2:4  d) 4:8

48. Which one of the following is the voice output device?
    a) Microphone  b) Speaker  c) Light pen  d) OCR

49. CD-ROM Stands for
    a) Creative Disk – Read Only Memory  b) Compact Disk – Read Only Memory  c) Copy Disk – Read Only Memory  d) Compact Data Disk – Read Only Memory

50. A _______ is an elementary building block of a digital circuit.
51. Boolean function of OR gate is
   a) C= A.B b) C= A+B c) C= A/B d) C= A*B
52. The Logical Symbol of NOT gate is
   a) b) c) d)
53. ______ gates are called as Universal gates
   a) NAND & NOR b) AND & OR c) NOT & NOR d) None of these
54. A unit that adds two binary digits is called a ______
   a) Full Adder b) Half Adder c) Logic Gate d) Flip Flop
55. A ______ is a circuit which is capable of remembering the value which is given as Input
   a) Full Adder b) Half Adder c) Logic Gate d) Flip Flop
56. Which sign is used to denote the AND function?
   a) b) + c) * d) >
57. The ______ gate circuit is an OR gate followed by an inverter
   a) NAND b) NOR c) XOR d) XNOR
58. ______ is an electronic workbench
   a) Multisim b) Adder c) Flipflop d) Logic gate
59. Boolean function of XOR gate is
   a) C= AB + BA  b) C= AB + AB c) C= A+B d) C= A.B
60. The Logical symbol of XNOR gate is
   a) b) c) d)
61. The Operating System comes under the _____ software category
   a) Application b) System c) Games d) Educational
62. DMA stands for
   a) Disk Memory Access b) Digital Memory Access c) Digital Main Access d) Direct Memory Access
63. In ______ memory is divided into many partitions
   a) Job Scheduling b) Multiprogramming c) Time sharing d) None of these
64. Multi programming was followed by _______ concept
   a) Job Scheduling b) Spooling c) Time sharing d) None of these
65. As per the number of users, there are _____ types of Operating System
   a) five b) four c) three d) two
66. _______ is an example for Single User Operating System
   a) Unix b) Windows c) MS-DOS d) All of these
67. Most desirable character of Operating system
   a) Security managementb) Memory management c) Process Management d) All of these
68. FIFO stands for
   a) Fast In Fast Out b) Fast In First Out c) First In First Out d) First In Fast Out
69. Operating System allows _______ levels of security to the user
   a) five b) four c) three d) two
70. ______ superior to the buffer.
   a) Job Scheduling b) Spooling c) Time sharing d) None of these
71. Which algorithm is based on the size of the job?
   a) FIFO b) SJF c) Round Robin d) Based on priority
72. In Round Robin algorithm, jobs are assigned processor time in a ______ method
   a) Star b) bus c) rectangular d) circular
73. SJF stands for
   a) Shortest Job First b) Software Job First c) Sequence Job First d) Software Job Final
74. GUI stands for
   a) Graphical User Internet b) Graphical User Interface c) Graphical User Information d) Graphical User Instruction
75. A set of instruction providing an interface between the operating system and the user programs is called
   a) system call b) time-sharing c) multiprogramming d) spooling

Answer any 20 only

PART – B

20x2=40

76. What is computer?
77. What are peripheral devices?
78. Define ‘DATA’
79. What is a word processor software?
80. What is an analog computing system?
81. What are the types of software?
82. Write the procedure to find the 2’s complement notation.
83. Write the DeMorgan’s Theorem
84. Convert the following Hexadecimal number into decimal numbers
   a) B616  b) CA16
85. Convert the following binary numbers into hexadecimal numbers
   a) 1012  b) 101112
86. Write -27 as an 8-bit 2’s Complement number
87. Write the essentials of the stored program concept
88. What do you mean by memory access time?
89. What is a bus?
90. What is the advantage of EPROM over EEPROM?
91. What are registers?
92. Give the truth table of XOR gates for two inputs.
93. What is a full adder?
94. What is sequential circuit?
95. Define an OS
96. What are the main functions of OS?
97. Write note on User Interface.
98. What are the types of OS?
99. Define : Spooling
100. What are the various levels of Security Management of OS?

Answer any 7 only

PART – C

7x 5 = 35

101. Discuss the various computer generations along with the characteristics of the computer of each generation.
102. Discuss in detail about the classification of Micro computer.
103. Convert the following binary numbers into their equivalent binary, octal and hexadecimal numbers
   a) 777  b) 160
104. Simplify the following equation:
   \[ E = (\overline{A \cdot B}) + \overline{C} \]
105. Describe in detail the various units of the Central Processing Unit
106. Briefly explain the various types of memory.
107. What is an Output device ? Explain any two of them in detail.
108. Determine the truth table for the following Boolean functions
109. Explain in detail about the various types of Process Management of OS.
110. List out advantages of the Distributed Operating System over the Network Operating System.