

13P/208/4

Question Booklet No.....

(To be filled up by the candidate by blue/black ball-point pen)

Roll No.

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

Roll No.

(Write the digits in words)

Serial No. of OMR Answer Sheet

Day and Date

(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES(Use only **bluc/black ball-point pen** in the space above and on both sides of the Answer Sheet)

1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall *except the Admit Card without its envelope.*
3. A separate Answer Sheet is given. *It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.*
4. Write your *Roll Number and Serial Number of the Answer Sheet* by pen in the space provided above.
5. **On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.**
6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and also Roll No. and OMR Sheet No. on the Question Booklet.
7. Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
8. Each question in this Booklet is followed by four alternative answers. *For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the Answer Sheet.*
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. *Note that the answer once filled in ink cannot be changed.* If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero mark).
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit *only the OMR Answer Sheet* at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

[अपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गए हैं।]

[No. of Printed Pages : 26+2]



13P/208/4

No. of Questions/प्रश्नों की संख्या : 150

Time/समय : 2 Hours/घण्टे

Full Marks/पूर्णांक : 450

Note/नोट : (1) Attempt as many questions as you can. Each question carries 3 marks. One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.

अधिकाधिक प्रश्नों को हल करने का प्रयत्न को। प्रत्येक प्रश्न 3 अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जाएगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा।

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

यदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हों, तो निकटतम सही उत्तर दें।

1. Conversion of decimal 41.6875 into binary is

(1) $(101.101)_2$ (2) $(01.0100)_2$ (3) $(10.10001)_2$ (4) $(101001.1011)_2$

2. The access method used for magnetic tape is

(1) direct (2) random (3) sequential (4) None of the above

(322)

1

(P.T.O.)

3. Which of the following holds the ROM, CPU, RAM and expansion cards?
(1) Hard disk (2) Floppy disk (3) Mother board (4) None of the above
4. The language that the computer can understand and execute is called
(1) machine language (2) application software
(3) system program (4) None of the above
5. Which of the following devices can be used to directly input printed text?
(1) OCR (2) OMR (3) MICR (4) None of the above
6. CD-ROM is a
(1) semiconductor memory (2) memory registers
(3) magnetic memory (4) None of the above
7. Actual execution of instructions in a computer takes place in
(1) ALU (2) control unit (3) storage unit (4) None of the above
8. Execution of two or more programs by a single CPU is known as
(1) multiprocessing (2) time sharing
(3) multiprogramming (4) None of the above
9. Ethernet uses
(1) bus topology (2) ring topology (3) mesh topology (4) None of the above

10. Typical bandwidth of optical fibers is
(1) order of GHz (2) order of kHz (3) order of Hz (4) None of the above
11. A large number of computers in a wide geographical area can be efficiently connected by
(1) twisted pair lines (2) coaxial cables
(3) communication satellites (4) None of the above
12. Bug means
(1) a logical error in a program
(2) documenting programs using an efficient documentation too
(3) a difficult syntax error in a program
(4) None of the above
13. The part of machine level instruction, which tells the central processor what was to be done is
(1) operation code (2) address
(3) operand (4) None of the above
14. Which of the following is not true about 4GL ?
(1) 4GL does not support a high-level of screen interaction
(2) Many database management system packages support 4GLs
(3) A 4GL is a software tool which is written, possibly, in some third generation language
(4) None of the above

- 15.** A translator is best described as
- (1) an application software
 - (2) a system software
 - (3) a hardware component
 - (4) None of the above
- 16.** Which of the following does not represent an I/O device?
- (1) Speaker which beeps
 - (2) Joystick
 - (3) Plotter
 - (4) ALU
- 17.** Example of non-numerical data is
- (1) employee address
 - (2) examination score
 - (3) bank balance
 - (4) None of the above
- 18.** Third generation computers
- (1) were the first to use built-in error detecting device
 - (2) used transistors instead of vacuum tubes
 - (3) were the first to use neural network
 - (4) None of the above
- 19.** The term 'baud' is a measure of the
- (1) speed at which data travels over the communication line
 - (2) memory capacity
 - (3) instruction execution time
 - (4) All of the above

20. A bootstrap is
- (1) a memory device
 - (2) a device to support the computer
 - (3) a small initialization program to start up a computer
 - (4) an error correction technique
21. Pick out the wrong definition
- (1) Access time—time needed to access the output
 - (2) EDP—acronym for Electronic Data Processing
 - (3) COBOL—a language used for business data processing
 - (4) Control unit—heart of a computer
22. Multiple choice examination answer sheets can be evaluated automatically by
- (1) Optical Mark Reader
 - (2) Optical Character Reader
 - (3) Magnetic Tape Reader
 - (4) Magnetic Ink Character Reader
23. Which of the following would cause quickest access?
- (1) Direct access from a magnetic tape
 - (2) Direct access from a hard disk
 - (3) Direct access from a floppy disk
 - (4) Direct access from a cassette tape
24. Subtraction of $(1010)_2$ from $(1101)_2$ using 1st complement is
- (1) $(1100)_2$
 - (2) $(0011)_2$
 - (3) $(1001)_2$
 - (4) $(0101)_2$

25. Using 2's complement, subtraction of $(1010)_2$ from $(0011)_2$ is
(1) $(0111)_2$ (2) $(1001)_2$ (3) $-(0111)_2$ (4) $-(1001)_2$
26. In 1st complement a number to be subtracted is known as
(1) subtrahend (2) minuend (3) carry (4) None of these
27. The chief reason why digital computers use complemental subtraction is that it
(1) simplifies their circuitry
(2) is a very simple process
(3) can handle negative numbers easily
(4) avoids direct subtraction
28. When an input electrical signal $A = 10100$ is applied to a NOT gate, its output signal is
(1) 01011 (2) 10101 (3) 10100 (4) 00101
29. Which is not universal gate?
(1) XNOR (2) XOR (3) NOR (4) NOT
30. Which is similar to MICR ?
(1) OMR (2) DVD (3) Bar Code (4) OCR
31. What is the difference between a declaration and a definition of a variable?
(1) Both can occur multiple times, but a declaration must occur first
(2) There is no difference between them
(3) A definition occurs once, but a declaration may occur many times
(4) A declaration occurs once, but a definition may occur many times

32. What will be the output when following code is executed?

```
int a = 10, b;
b = a ++ + ++a;
printf("%d,%d,%d,%d", b, a ++, a, ++a);
```
- (1) 12, 10, 11, 13 (2) 22, 10, 11, 13
 (3) 22, 11, 11, 11 (4) 22, 13, 13, 13
33. 'C' is which kind of language?
 (1) Machine (2) Procedural
 (3) Assembly (4) Object-oriented
34. Which one of the following 'C' operators is right associative?
 (1) = (2) , (3) [] (4) ^
35. What are two predefined FILE pointers in 'C' ?
 (1) stdout and stderr (2) console. and error
 (3) stdout and stdio (4) stdio and stderr
36. With every use of a memory allocation function, what function should be used to release allocated memory which is no longer needed?
 (1) unalloc() (2) dropmem() (3) dealloc() (4) free()
37. To delete a dynamically allocated array named 'a', the correct statement is
 (1) delete a; (2) delete a[0]; (3) delete []a; (4) delete [0]a;

38. Time taken for addition of element in queue is
(1) $O(1)$ (2) $O(n)$ (3) $O(\log n)$ (4) None of these
39. Which of the following are tokens in 'C' ?
(1) Keywords (2) Variables (3) Constants (4) All of the above
40. The size of a string variable is
(1) 1 byte (2) 8 bytes (3) 16 bytes (4) None of these
41. What is the similarity between a structure, union and enumeration?
(1) All of them let you define new values
(2) All of them let you define new data types
(3) All of them let you define new pointers
(4) All of them let you define new structures
42. The keyword used to transfer control from a function back to the calling function is
(1) switch (2) goto (3) go back (4) return
43. Input/output function prototypes and macros are defined in which header file?
(1) conio.h (2) stdlib.h (3) stdio.h (4) dos.h
44. What is stderr?
(1) standard error (2) standard error types
(3) standard error streams (4) standard error definitions

45. Can you combine the following two statements into one?

```
char *p;  
p = (char*) malloc(100);
```

- (1) char p = *malloc(100); (2) char *p = (char) malloc(100);
(3) char *p = (char*)malloc(100); (4) char *p = (char*)(malloc*)(100);

46. Which of the following is not logical operator?

- (1) & (2) && (3) || (4) !

47. Which looping process checks the test condition at the end of the loop?

- (1) for
(2) while
(3) do-while
(4) no looping process checks the test condition at the end

48. What is wrong? for (int k = 2, k <= 12, k++)

- (1) the increment should always be ++k
(2) the variable must always be the letter i when using a for loop
(3) there should be a semicolon at the end of the statement
(4) the commas should be semicolons

49. A constructor is called whenever

- (1) an object is declared (2) an object is used
(3) a class is declared (4) a class is used

- 50.** In C++ a function contained within a class is called
- (1) a member function
 - (2) an operator
 - (3) a class function
 - (4) a method
- 51.** Which of the following data structures is linear data structure?
- (1) Trees
 - (2) Graphs
 - (3) Arrays
 - (4) None of the above
- 52.** The memory address of the first element of an array is called
- (1) floor address
 - (2) foundation address
 - (3) first address
 - (4) base address
- 53.** Which of the following data structures are indexed structures?
- (1) linear arrays
 - (2) linked lists
 - (3) Both of the above
 - (4) None of the above
- 54.** Which of the following is not the required condition for binary search algorithm?
- (1) The list must be sorted
 - (2) There should be the direct access to the middle element in any sublist
 - (3) There must be mechanism to delete and/or insert elements in list
 - (4) None of the above
- 55.** Two-dimensional arrays are also called
- (1) tables arrays
 - (2) matrix arrays
 - (3) Both of the above
 - (4) None of the above

56. Finding the location of the element with a given value is
(1) traversal (2) search (3) sort (4) None of the above
57. The term 'push' and 'pop' is related to the
(1) array (2) lists (3) stacks (4) None of the above
58. A variable P is called pointer if
(1) P contains the address of an element in DATA
(2) P points to the address of first element in DATA
(3) P can store only memory addresses
(4) P contains the DATA and the address of DATA
59. When new data are to be inserted into a data structure, but there is no available space; this situation is usually called
(1) underflow (2) overflow (3) houseful (4) saturated
60. The complexity of bubble sort algorithm is
(1) $O(n)$ (2) $O(\log n)$ (3) $O(n^2)$ (4) $O(n \log n)$
61. Which of the following data structures store the homogeneous data elements?
(1) Arrays (2) Records (3) Pointers (4) None of these
62. Which of the following is two-way list?
(1) Grounded header list
(2) Circular header list
(3) Linked list with header and trailer nodes
(4) None of the above

- 63.** Each data item in a record may be a group item composed of sub-items; those items which are indecomposable are called
- (1) elementary items
 - (2) atoms
 - (3) scalars
 - (4) All of the above
- 64.** The operation of processing each element in the list is known as
- (1) sorting
 - (2) merging
 - (3) inserting
 - (4) traversal
- 65.** Two main measures for the efficiency of an algorithm are
- (1) processor and memory
 - (2) complexity and capacity
 - (3) time and space
 - (4) data and space
- 66.** The situation when in a linked list $START = NULL$ is
- (1) underflow
 - (2) overflow
 - (3) houseful
 - (4) saturated
- 67.** Which of the following names does not relate to stacks?
- (1) FIFO lists
 - (2) LIFO lists
 - (3) Piles
 - (4) Push-down lists
- 68.** A data structure where elements can be added or removed at either end but not in the middle is
- (1) linked lists
 - (2) stacks
 - (3) queues
 - (4) deque
- 69.** The time factor when determining the efficiency of algorithm is measured by
- (1) counting microseconds
 - (2) counting the number of key operations
 - (3) counting the number of statements
 - (4) counting the kilobytes of algorithm

70. Which of the following cases does not exist in complexity theory?
 (1) Best case (2) Worst case (3) Average case (4) Null case
71. Which of the following is statement?
 (1) How are you (2) $2+3=4$
 (3) Study Logic (4) Please sit down
72. Negation of the statement "4 is even and -5 is negative"
 (1) 4 is even or -5 is positive
 (2) 4 is odd or -5 is positive
 (3) 4 is not even and -5 is negative
 (4) 4 is not even and -5 is not negative
73. Which statement is true for the statement "If Paris is in India, then $2+3=5$ "?
 (1) Always false (2) Always truth
 (3) It is not a statement (4) None of these
74. Which statement is true for the statement $(p \rightarrow q) \wedge (p \rightarrow r) \rightarrow (p \rightarrow (r \wedge q))$?
 (1) Always false (2) Always truth
 (3) It is not a statement (4) None of these
75. Which of the following is equivalent to $(P \vee (P \wedge Q))$?
 (1) P (2) Q (3) $\neg P$ (4) $\neg Q$

76. Which of the following is equivalent to $(P \wedge (\neg P \vee Q))$?
 (1) P (2) Q (3) $\neg P$ (4) $\neg Q$
77. If $A = \{1, 2, 3\}$, $B = \{2, 3, 4\}$, then $(A - B) \cup (B - A)$ is
 (1) $\{2, 3\}$ (2) $\{3, 4\}$ (3) $\{1, 4\}$ (4) $\{1, 2, 3, 4\}$
78. If $S = \{a, \{b\}\}$, then which statement is true?
 (1) $b \in S$ (2) $\{b\} \subseteq S$ (3) $\{b\} \in S$ (4) $\{a\} \subseteq S$
79. $A = \{\phi, 1\}$, then number of power sets (number of all subsets of A) is
 (1) 1 (2) 2 (3) 4 (4) 0
80. If $A_1 = \{\{1, 2\}, \{3\}\}$, $A_2 = \{\{1\}, \{2, 3\}\}$ and $A_3 = \{\{1, 2, 3\}\}$, then the correct statement will be
 (1) $A_1 \subseteq A_2$ (2) $A_2 \subseteq A_1$ (3) $A_1 = A_2$ (4) $A_1 \cap A_2 \cap A_3 = \phi$
81. If $A = \{2, 5, 6\}$, $B = \{2, 3, 4\}$ and $C = \{1, 3, 4\}$, then correct statement will be
 (1) $A - B = C$ (2) $B - C = A$ (3) $A - C = A$ (4) $B - C = A - B$
82. Which statement is correct?
 (1) $A \cap B^c = B - A$ (2) $A \cap B^c = A - B$
 (3) $A \Delta B = A - B$ (4) $A \Delta B = B - A$
83. The relation of mother is
 (1) reflexive (2) sensitive (3) transitive (4) None of these

84. Which relation is symmetric, reflexive and transitive?
 (1) $<$ (2) $>$ (3) $=$ (4) Square
85. The relation $R = \{(1, 2), (2, 3), (1, 3), (2, 1), (1, 1)\}$ is
 (1) reflexive (2) transitive (3) symmetric (4) All of these
86. The relation $R = \{(1, 1), (2, 2), (1, 2), (2, 1)\}$ is
 (1) reflexive (2) transitive (3) symmetric (4) All of these
87. According to bisection method, the roots of equation $f(x) = 0$ are located between two numbers a and b , if $f(x)$ is continuous between a and b at least one
 (1) $f(a)$ and $f(b)$ have opposite sign (2) $f(a)$ and $f(b)$ have same sign
 (3) Both (1) and (2) (4) None of these
88. For a function $f(x) = 0$, Newton-Raphson formula will be useful to exact root $x_0 + h = x_1$ (say)
 (1) $f(x)$ is large (2) graph of $f(x)$ near the root
 (3) Both (1) and (2) (4) None of these
89. In connectives, the resulting statements are
 (1) molecular statement (2) variable statement
 (3) primary statement (4) secondary statement
90. A homomorphism of a semi-group is called
 (1) monoid (2) algebra (3) matrix (4) endomorphism

- 91.** Which of the following file formats supports in Windows 7 ?
(1) NTFS (2) BSD (3) EXT (4) All of the above
- 92.** The primary job of the operating system is
(1) manage commands (2) manage users
(3) manage programs (4) manage resources
- 93.** The multi-level queue scheduling needs
(1) only one queue (2) only two queues
(3) only three queues (4) as many as queues required
- 94.** Who is called a supervisor of computer activity?
(1) Memory (2) Operating system
(3) I/O devices (4) Control unit
- 95.** Virtual memory is
(1) extremely large main memory
(2) extremely large secondary memory
(3) an illusion of extremely large main memory
(4) an illusion of extremely large secondary memory
- 96.** What should be the first step while OS upgrading?
(1) Delete old operating system (2) Backup old operating system
(3) Backup critical data (4) Format hard disks

97. UNIX Operating System is a
- (1) multi-user operating system
 - (2) time sharing operating system
 - (3) multi-tasking operating system
 - (4) All of the above
98. In which type of the following OS, the response time is very crucial?
- (1) Network Operating System
 - (2) Real Time Operating System
 - (3) Batch Operating System
 - (4) UNIX Operating System
99. External fragmentation takes place in
- (1) simple paging
 - (2) dynamic partitioning
 - (3) fixed partitioning
 - (4) simple segmentation
100. Which variable supports synchronization of processes?
- (1) Semaphore
 - (2) Monitors
 - (3) Local variable
 - (4) Global variable
101. Which one of the following loading schemes uses relative addressing?
- (1) Absolute loading
 - (2) Dynamic runtime loading
 - (3) Relocatable loading
 - (4) None of these
102. Threads are called
- (1) lightweight processes
 - (2) active processes
 - (3) passive processes
 - (4) heavyweight processes

- 103.** Maximum page fault occurs in which page replacement algorithm?
(1) LRU (2) FIFO (3) CLOCK (4) OPT
- 104.** Relocation takes place in
(1) dynamic loading (2) direct loading
(3) absolute loading (4) None of these
- 105.** Which of the following Operating Systems does not implement multitasking truly?
(1) Windows 98 (2) Windows NT (3) Windows XP (4) MS DOS
- 106.** Inverted pointers provide
(1) physical record key (2) secondary access path
(3) inverted index (4) All of these
- 107.** Which two files are used for class operation of DBMS ?
(1) Query language and utility
(2) Data manipulation language and query language
(3) Data dictionary and transaction language
(4) Data dictionary and query language
- 108.** Which is the database administrator function?
(1) Database design (2) Backing up database
(3) Both (1) and (2) (4) None of these

109. Which of the following is responsibility of the utility component of database software?
- (1) Creating the physical and logical design
 - (2) Removing selected record for deletion
 - (3) Creating and maintaining data dictionary
 - (4) Monitoring performance
110. Data security threads include
- (1) H/W failure
 - (2) privacy invasion
 - (3) manipulation of data
 - (4) All of these
111. Update database means
- (1) revising file structure
 - (2) adding or modifying record occurrence
 - (3) reorganizing database
 - (4) All of these
112. Which language has Defacto standard for interfacing application program with relational database system?
- (1) Oracle
 - (2) SQL
 - (3) Database
 - (4) 4GL
113. Which is relational database?
- (1) Database 4
 - (2) Fourth dimension
 - (3) FoxPro
 - (4) Reflex

114. Large collection of file is called

- (1) database (2) field (3) record (4) sector

115. Periodically changing, adding and deleting file record is called

- (1) file updating (2) file renewing
(3) file restructuring (4) file upgrading

116. A record in 3rd normal form is better than 2nd and 1st normal from the relational mathematical viewpoint

- (1) True (2) False
(3) Both of the above (4) None of the above

117. In SQL, which command is used to enable/disable all trigger on a table?

- (1) Alter trigger (2) Alter table
(3) Modify trigger in table (4) All of these

118. A compound key

- (1) is made up of several piece of information
(2) uniquely identifies a item in a list
(3) is a combination of all unique key
(4) Both (1) and (2)

119. The designer of a form includes

- (1) field designator (2) prompt
(3) data name (4) both (1) and (2)

120. A data dictionary is a special file that contains
- (1) data name of all field in all file (2) data type of all field in all file
(3) width of all field in all file (4) All of the above
121. In OSI network architecture, the dialogue control and token management are responsibility of
- (1) data link layer (2) network layer
(3) transport layer (4) session layer
122. In OSI network architecture, the routing is performed by
- (1) network layer (2) session layer
(3) data link layer (4) transport layer
123. Which of the following performs modulation and demodulation?
- (1) Fiber optics (2) Satellite (3) Coaxial cable (4) Modem
124. The process of converting analog signals into digital signals so they can be processed by a receiving computer is referred to as
- (1) digitizing (2) modulation (3) demodulation (4) synchronizing
125. How many OSI layers are covered in the X.25 standard?
- (1) Two (2) Seven (3) Three (4) Six
126. Layer one of the OSI model is
- (1) physical layer (2) network layer
(3) link layer (4) transport layer

127. The X.25 standard specifies a
- (1) technique for start-stop data
 - (2) technique for dial access
 - (3) data bit rate
 - (4) DTE/DCE interface
128. Which of the following communication modes supports two-way traffic but in only one direction at a time?
- (1) Simplex
 - (2) Modem
 - (3) Half-duplex
 - (4) Three-quarters duplex
129. Which of the following might be used by a company to satisfy its growing communications needs?
- (1) Front end processor
 - (2) Multiplexer
 - (3) Controller
 - (4) All of the above
130. What is the number of separate protocol layers at the serial interface gateway specified by the X.25 standard?
- (1) 4
 - (2) 3
 - (3) 2
 - (4) 6
131. The interactive transmission of data within a time sharing system may be best suited to
- (1) half-duplex lines
 - (2) simplex lines
 - (3) biflex-lines
 - (4) full-duplex lines

132. Which of the following statements is incorrect?
- (1) The difference between synchronous and asynchronous transmission is the clocking derived from the data in synchronous transmission
 - (2) Half-duplex line is a communication line in which data can move in two directions, but not at the same time
 - (3) Teleprocessing combines telecommunications and DP techniques in online activities
 - (4) Batch processing is the preferred processing mode for telecommunication operation
133. Which of the following is considered a broadband communication channel?
- (1) Coaxial cable
 - (2) Fiber optics cable
 - (3) Microwave circuits
 - (4) All of the above
134. Which of the following is not a transmission medium?
- (1) Modem
 - (2) Telephone lines
 - (3) Coaxial cables
 - (4) Microwave systems
135. Which of the following does not allow multiple uses or devices to share one communication line?
- (1) Controller
 - (2) Multiplexer
 - (3) Concentrator
 - (4) Doubleplexer
136. Which of the following languages that computer can understand and execute?
- (1) Machine language
 - (2) 'C'-programming language
 - (3) Java programming language
 - (4) None of the above

- 137.** Who is credited for using punch cards to control patterns of a weaving machine?
- (1) Blaise Pascal (2) Herman Hollerith
(3) Jacquard (4) Charles Babbage
- 138.** Dedicated computer means
- (1) doesn't have OS
(2) used by single person
(3) assigned to one and only one task
(4) All of the above
- 139.** Computer keyboard can be classified as —— device.
- (1) memory (2) input (3) output (4) storage
- 140.** Physical connection between microprocessor memory and other parts is called
- (1) path (2) hub (3) address bus (4) None of the above
- 141.** Shortcut notation for groups of four binary digits is called —— number system.
- (1) unicode (2) decimal (3) binary (4) hexadecimal
- 142.** What is the full form of AT in the IBM PC-AT ?
- (1) Applied Technology (2) Advance Technology
(3) Additional Technology (4) None of the above

143. ——— has the shortest access times.
- (1) Cache memory (2) Virtual memory
(3) Secondary memory (4) All of the above
144. In Computer Terminology, 'CAD' stands for
- (1) Computer And Design (2) Computer Algorithm in Design
(3) Computer Aided Design (4) None of the above
145. Which of the following is not an input device?
- (1) Touch screen (2) Optical scanners
(3) Touch pad (4) Mouse pad
146. What difference does the 5th generation computer have from other generation computers?
- (1) Technological advancement (2) Scientific code
(3) Object-oriented programming (4) All of the above
147. A technique used by codes to convert an analog signal into a digital bit stream is known as
- (1) pulse code modulation (2) pulse stretcher
(3) query processing (4) queue management
148. Which is not browser?
- (1) Chrome (2) Safari (3) Swiftfox (4) Blog

149. Which is latest operating system?

- (1) Windows 2000
- (2) UNIX Professional
- (3) Windows XP
- (4) Windows 2008

150. Which one is latest tablet?

- (1) Teramycine
- (2) Zero-bug
- (3) Aakash
- (4) Antivirus name



अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली या काली बाल-प्वाइंट पेन से ही लिखें।)

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा, केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न पुस्तिका पर अनुक्रमांक सं० और ओ० एम० आर० पत्र सं० की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा वह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ०एम०आर० उत्तर-पत्र परीक्षा भवन में जमा कर दें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जान की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भागी होगा/होगी।