Roll No.----------------------

Paper Code

| 4 | 9 | 1 |

(To be filled in the OMR Sheet)

O.M.R. Serial No. ⬜⬜⬜⬜⬜⬜⬜⬜

491

B.C.A.(First Semester) Examination, February/March-2022

BCA-1001

Computer Fundamental & Problem Solving Techniques

Time : 1:30 Hours   **Maximum Marks-100**

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

निर्देश : – 1. परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही– सही भरें, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।

2. इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमे से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने है। प्रत्येक प्रश्न के चार वैकल्पिक उत्तर प्रश्न के नीचे दिये गये हैं। इन चारों में से केवल एक ही उत्तर सही है। जिस उत्तर को आप सही या सबसे उचित समझते हैं, अपने उत्तर पत्रक (O.M.R. ANSWER SHEET)में उसके अक्षर वाले वृत्त को काले या नीले बाल प्वांइट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा निर्धारित प्रश्नों से अधिक प्रश्नों के उत्तर दिये जाते हैं तो उसके द्वारा हल किये गये प्रथमतः यथा निर्दिष्ट प्रश्नोत्तरों का ही मूल्यांकन किया जायेगा।

3. प्रत्येक प्रश्न के अंक समान हैं। आप के जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।

4. सभी उत्तर केवल ओ०एम०आर० उत्तर पत्रक (O.M.R. ANSWER SHEET) पर ही दिये जाने हैं। उत्तर पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।

5. ओ०एम०आर० उत्तर पत्रक (O.M.R. ANSWER SHEET) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाय।

6. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी प्रश्नपुस्तिका बुकलेट एवं ओ०एम०आर० शीट पृथक–पृथक उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।

7. निगेटिव मार्किंग नहीं है।

महत्वपूर्ण : – प्रश्नपुस्तिका खोलने पर प्रथमतः जॉच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभॉति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।

1. The binary addition 1+1+1 gives

   (A) 111

   (B) 10

   (C) 110

   (D) 11

2. The digital systems usually operate on _____ system.

   (A) Binary

   (B) Decimal

   (C) Octal

   (D) Hexadecimal

3. One hex digit is sometimes referred to as a(n):

   (A) Byte

   (B) Nibble

   (C) Grouping

   (D) Instruction

4. Convert in to decimal: $(214)_8$ =?

   (A) $(140)_{10}$

   (B) $(141)_{10}$

   (C) $(142)_{10}$

   (D) $(130)_{10}$

5. $(170)_{10}$ is equivalent to

   (A) $(FD)_{16}$

   (B) $(DF)_{16}$

   (C) $(AA)_{16}$

   (D) $(AF)_{16}$

6. The decimal equivalent of (LM17) is given by

   (A) 491

   (B) 499

   (C) 497

   (D) 498

7. The two digits hexadecimal number which has largest value is ___ which corresponds to _____

   (A) FE, 255 decimal

   (B) FF, 254 decimal

   (C) EF, 255 decimal

   (D) EF, 245 decimal

8. The octal number 645 in power of 8 is equal

   (A) 450

   (B) 451

   (C) 421

   (D) 501

9. If the decimal number is a fraction then its binary equivalent is obtained by _____ the number continuously by 2.

   (A) Dividing

   (B) Multiplying

   (C) Adding

   (D) Subtracting

10. Which of the following is not a type of number system?

    (A) Positional

    (B) Non-Positional

    (C) Octal

    (D) Fractional

11. How is the number 5 represented in non-positional number system?

    (A) IIIII

    (B) 5

    (C) V

    (D) v

12. The base is the total number of digits in a number system.

    (A) True

    (B) False

    (C) Ambiguous statement

    (D) None of these

13. The LSB and MSB of 1243247 are ___ and ___

    (A) 1, 7

    (B) 4, 7

    (C) 7, 1

    (D) 4, 1

14. A device that uses positional notation to represent a decimal number.

    (A) Abacus

    (B) Calculator

    (C) Pascaline

    (D) Computer

15. The 2's complement of 5 is _____

    (A) 1011

    (B) 0101

    (C) 1010

    (D) 0011

16. What does BCD stand for?

    (A) Bitwise coded decimal

    (B) Binary coded decimal

    (C) Binary converted decimal

    (D) Bitwise converted decimal

17. 1 zettabyte = _____

    (A) 1024 TB

    (B) 1024 EB

    (C) 1024 ZB

    (D) 1024 PB

18. Perform BCD addition: 2+3= _____

    (A) 0010

    (B) 0011

    (C) 0101

    (D) 1010

19. ASCII stands for _____

    (A) American standard code for information interchange

    (B) American scientific code for information interchange

    (C) American scientific code for international interchange

    (D) American standard code of international interchange

20. In MS-Dos 6.22, which part identifies the product uniquely?

(A) MS

(B) DOS

(C) Ms-DOS

(D) 6.22

21. In Ms-Dos what command you will use to display system date?

(A) Date command

(B) Ver command

(C) Disk command

(D) Format command

22. While working with Ms-Dos which command transfers a specific file from one disk to another?

(A) Copy

(B) Disk copy

(C) Time

(D) Rename

23. If you don't know the current time, which command will you use to display

(A) Copy

(B) Ver

(C) Time

(D) Format

24. Which command divides the surface of the blank disk into sectors and assign a unique address to each one

(A) Ver

(B) Format

(C) Fat

(D) Chkdsk

25. Each time you turn on your computer, it will check on the control file

(A) Command.com, io.sys

(B) Command.com, date.com, dir.com

(C) Command.com, io.sys, msdos.sys

(D) Chkdsk.exe

26. If you need to duplicate the entire disk, which command will you use?

(A) Copy

(B) Disk copy

(C) Chkdsk

(D) Format

27. Which of the following extensions suggest that file is a backup copy

(A) Bak

(B) Bas

(C) Com

(D) Txt

28. Which command lists the contents of current directory of a disk?

(A) Copy

(B) Tree

(C) Cd

(D) Dir

29. Only filenames and extensions are to be displayed in wide format, which command you'll use?

   (A) Dir/w

   (B) Dir a:

   (C) Dir/s

   (D) Dir/b

30. Which command displays all the files having the same name but different extensions?

   (A) Dir filename. *

   (B) Dir filename.ext

   (C) Dir * .sys

   (D) Dir * .ext

31. Which command displays only file and directory names without size, date and time information?

   (A) Dir/w

   (B) Dir a:

   (C) Dir/b

   (D) Dir/s

32. Which command displays comma for thousand separating on file size while listing?

   (A) Dir/w

   (B) Dir/s

   (C) Dir/b

   (D) Dir/c

33. Which command is used to display all the files having the (.exe) extension but different filename?

(A) Dir filename. *

(B) Dir filename.ext

(C) Dir * .sys

(D) Dir * .ext

34. Which command should be used to display all files within the specified subordinate directory of the subdirectory?

(A) Dir \ pathname

(B) Dir \ pathname \ pathname

(C) Dir \ ch

(D) Dir \ pathname \ filename

35. Which command displays the directory list including files in tree structure?

(A) Dir/s/f

(B) Tree/f

(C) Tree/s/f

(D) Dir/f

36. Which command will be used to display a file within the specified directory of pathname?

(A) Dir\pathname

(B) Dir\pathname \pathname

(C) Dir/ch

(D) Dir \pathname\filename

37. Which command creates a directory or subdirectory?

(A) Dir

(B) Mkdir

(C) Md

(D) None of these

38. Which command displays current directory name or change from one to another?

(A) Chdir

(B) Cd

(C) Mkdir

(D) Both a and b

39. Which command is used to delete the directory that is empty?

(A) Del *. *

(B) RD

(C) Erase

(D) MD

40. These devices provide a means of communication between a computer and outer word.

(A) I/O

(B) Storage

(C) Compact

(D) Drivers

41. The I/O devices are sometimes called the peripheral devices because they surround the CPU and memory of the computer system.

    (A) True

    (B) False

    (C) Ambiguous statement

    (D) None of these

42. What does GUI stand for?

    (A) Graphical User Instruction

    (B) Ground User Interface

    (C) General User Instruction

    (D) Graphical User Interface

43. Which of the following is not a point-and-draw device?

    (A) Keypad

    (B) Trackball

    (C) Touch screen

    (D) Mouse

44. A device used for video games, flight simulators, training simulators and for controlling industrial robots.

    (A) Mouse

    (B) Light pen

    (C) Joystick

    (D) Keyboard

45. What does the symbol D represent in a hexadecimal number system?

   (A) 8

   (B) 16

   (C) 13

   (D) 14

46. ABC is a valid hexadecimal number.

   (A) True

   (B) False

   (C) Ambiguous statement

   (D) None of these

47. The maximum number of bits sufficient to represent a hexadecimal number in binary:

   (A) 4

   (B) 3

   (C) 7

   (D) 8

48. The binary number 1110 in hexadecimal format is _____

   (A) 6

   (B) E

   (C) 14

   (D) 15

49. Convert $(52)_{16}$ into its decimal equivalent.

(A) 28

(B) 83

(C) 80

(D) 82

50. The hexadecimal equivalent of the binary number $(0010010100)2$ is :

(A) 0B4

(B) 0A4

(C) 224

(D) 0114

51. Who is the father of Computers?

(A) James Gosling

(B) Charles Babbage

(C) Dennis Ritchie

(D) Bjarne Stroustrup

52. Which of the following is the correct abbreviation of COMPUTER?

(A) Commonly Occupied Machines Used in Technical and Educational Research

(B) Commonly Operated Machines Used in Technical and Environmental Research

(C) Commonly Oriented Machines Used in Technical and Educational Research

(D) Commonly Operated Machines Used in Technical and Educational Research

53. Which of the following is the correct definition of Computer?

(A) Computer is a machine or device that can be programmed to perform arithmetical or logic operation sequences automatically

(B) Computer understands only binary language which is written in the form of 0s & 1s

(C) Computer is a programmable electronic device that stores, retrieves, and processes the data

(D) All of the mentioned

54. What is the full form of CPU?

(A) Computer Processing Unit

(B) Computer Principle Unit

(C) Central Processing Unit

(D) Control Processing Unit

55. Which of the following language does computer understand?

(A) Computer Understands Only C Language

(B) Computer Understands Only Assembly Language

(C) Computer Understands Only Binary Language

(D) Computer Understands Only BASIC

56. Which of the following computer language is written in binary codes only?

(A) Pascal

(B) Machine language

(C) C

(D) C#

57. Which of the following is the brain of the computer?

 (A) Central Processing Unit

 (B) Memory

 (C) Arithmetic and Logic Unit

 (D) Control Unit

58. Which of the following is not a characteristic of a computer?

 (A) Versatility

 (B) Accuracy

 (C) Diligence

 (D) I.Q.

59. What is the word length of a personal computer?

 (A) 32 bits

 (B) 8 bits

 (C) 64 bits

 (D) 16 bits

60. Which of the following is the smallest unit of data in a computer?

 (A) Bit

 (B) KB

 (C) Nibble

 (D) Byte

61. Which of the following unit is responsible for converting the data received from the user into a computer understandable format?

 (A) Output Unit

 (B) Input Unit

 (C) Memory Unit

 (D) Arithmetic & Logic Unit

62. Which of the following monitor looks like a television and normally used with non-portable computer systems?

(A) LED

(B) LCD

(C) CRT

(D) Flat Panel Monitors

63. Which of the following is not a type of computer code?

(A) EDIC

(B) ASCII

(C) BCD

(D) EBCDIC

64. Which of the following part of a processor contains the hardware necessary to perform all the operations required by a computer?

(A) Controller

(B) Registers

(C) Cache

(D) Data path

65. Which of the following is designed to control the operations of a computer?

(A) User

(B) Application Software

(C) System Software

(D) Utility Software

66. Which of the following device use positional notation to represent a decimal number?

(A) Pascaline

(B) Abacus

(C) Computer

(D) Calculator

67. Which of the following is used in EBCDIC?

(A) Super Computers

(B) Mainframes

(C) Machine Codes

(D) Programming

68. Which of the following are physical devices of a computer?

(A) Hardware

(B) Software

(C) System Software

(D) Package

69. Which of the following defines the assigned ordering among the characters used by the computer?

(A) Accumulation

(B) Sorting

(C) Collating Sequence

(D) Unicode

70. Which of the following storage is a system where a robotic arm will connect or disconnect off-line mass storage media according to the computer operating system demands?

(A) Magnetic

(B) Secondary

(C) Virtual

(D) Tertiary

71. Which of the following is known as the interval between the instant a computer makes a request for the transfer of data from a disk system to the primary storage and the instance the operation is completed?

(A) Disk utilization time

(B) Drive utilization time

(C) Disk access time

(D) Disk arrival time

72. Which of the following devices provides the communication between a computer and the outer world?

(A) Compact

(B) I/O

(C) Drivers

(D) Storage

73. Which of the following are the input devices that enable direct data entry into a computer system from source documents?

(A) System Access devices

(B) Data acquiring devices

(C) Data retrieving devices

(D) Date Scanning devices

74. Which of the following is the device used for converting maps, pictures and drawings into digital form for storage in computers?

(A) Image Scanner

(B) Digitizer

(C) MICR

(D) Scanner

75. Which of the following can access the server?

(A) Web Client

(B) User

(C) Web Browser

(D) Web Server

76. Which of the following is known as the language made up of binary-coded instructions?

(A) High level

(B) BASIC

(C) C

(D) Machine

77. What does CAD stands for?

(A) Calculation Aided Design

(B) Computer Aided Design

(C) Calculation Aided Draft

(D) Computer Aided Draft

78. Which of the following package allows individuals to use personal computers for storing and retrieving their personal information?

(A) Personal assistance package

(B) Graphics package

(C) Spreadsheet package

(D) Animation package

79. Which of the following is created when a user opens an account in the computer system?

(A) SFD

(B) MFD

(C) Subdirectory

(D) RFD

80. Which of the following is a technique that marked the beginning of computer communications?

(A) User Environment

(B) Batch Environment

(C) Time Sharing

(D) Message passing

81. Any electronic holding place where data can be stored and retrieved later whenever required is _____

(A) Memory
(B) Drive
(C) Disk
(D) Circuit

82. Cache memory is the onboard storage.

    (A) True

    (B) False

    (C) Ambiguous Statement

    (D) None of these

83. Which of the following is the fastest means of memory access for CPU?

    (A) Registers

    (B) Cache

    (C) Main memory

    (D) Virtual memory

84. The memory implemented using the semiconductor chips is _____

    (A) Cache

    (B) Main

    (C) Secondary

    (D) Registers

85. Data in computer terminology mean?

    (A) Figure

    (B) Raw facts

    (C) Both a & b

    (D) None of these

86. What is information?

    (A) Processed Data

    (B) Collection of a Program

    (C) Raw Data

    (D) Collection of Instructions

87. Full form of ALU

    (A) Application Logic Unit

    (B) Array Logic Unit

    (C) Arithmetic Logic Unit

    (D) Auxilary Logic Unit

88. Full form of CPU

    (A) Central Processing Unit

    (B) Central Program Unit

    (C) Common Processing Unit

    (D) Central Personal Unit

89. The Arithmetic Logic Unit performs which arithmetical operation?
    (A) $(+, -, *, /)$
    (B) (True. False)
    (C) $(<, >, =, > =, < >)$
    (D) All of these

90. Which of the following is not a positional number system?
    (A) Roman Number System
    (B) Octal Number System
    (C) Binary Number System
    (D) Hexadecimal Number System

91. The value of radix in binary number system is _____
    (A) 2
    (B) 8
    (C) 10
    (D) 1

92. The binary equivalent of the decimal number 10 is _____
    (A) 0010
    (B) 10
    (C) 1010
    (D) 010

93. A computer language that is written in binary codes only is _____
    (A) Machine language
    (B) C
    (C) C#
    (D) Pascal

94. The octal equivalent of 1100101.001010 is _____

    (A) 624.12

    (B) 145.12

    (C) 154.12

    (D) 145.21

95. The input hexadecimal representation of 1110 is _____

    (A) 0111

    (B) E

    (C) 15

    (D) 14

96. A bit in a computer terminology means either 0 or 1.
    (A) True
    (B) False
    (C) Ambiguous statement
    (D) None of These

97. Convert the binary equivalent 10101 to its decimal equivalent.
    (A) 21
    (B) 12
    (C) 22
    (D) 31

98. Which of the following is not a binary number?
    (A) 1111
    (B) 101
    (C) 11 E
    (D) 000

99. Which of the following is the correct representation of a binary number?

(A) $(124)_2$

(B) 1110

(C) $(110)^2$

(D) $(000)_2$

100. The cumulative addition of the four binary bits (1+1+1+1) gives

(A) 1111

(B) 111

(C) 100

(D) 1001

******

Rough Work / रफ कार्य

Rough Work / रफ कार्य

DO NOT OPEN THE QUESTION BOOKLET UNTIL ASKED TO DO SO

1. Examinee should enter his / her roll number, subject and Question Booklet Series correctly in the O.M.R. sheet, the examinee will be responsible for the error he / she has made.

2. **This Question Booklet contains 100 questions, out of which only 75 Question are to be Answered by the examinee. Every question has 4 options and only one of them is correct. The answer which seems correct to you, darken that option number in your Answer Booklet (O.M.R ANSWER SHEET) completely with black or blue ball point pen. If any examinee will mark more than one answer of a particular question, then the first most option will be considered valid.**

3. Every question has same marks. Every question you attempt correctly, marks will be given according to that.

4. Every answer should be marked only on Answer Booklet **(O.M.R ANSWER SHEET).**Answer marked anywhere else other than the determined place will not be considered valid.

5. Please read all the instructions carefully before attempting anything on Answer Booklet**(O.M.R ANSWER SHEET).**

6. After completion of examination please hand over the Answer Booklet **(O.M.R ANSWER SHEET)** to the Examiner before leaving the examination room.

7. There is no negative marking.

Note: On opening the question booklet, first check that all the pages of the question booklet are printed properly in case there is an issue please ask the examiner to change the booklet of same series and get another one.