



**BRAINWARE UNIVERSITY**

**Term End Examination 2020 - 21**

Programme – Bachelor of Science (Honours) in Biotechnology

Course Name – Computer Application

Course Code - BBT503C1

Semester / Year - Semester V

Time allotted : 85 Minutes

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group-A**

(Multiple Choice Type Question)

1 x 70=70

1. *(Answer any Seventy)*

(i) From what location are the 1st computer instructions available on boot up?

- |             |               |
|-------------|---------------|
| a) ROM BIOS | b) CPU        |
| c) Boot.ini | d) CONFIG.SYS |

(ii) Which one is the fastest one?

- |             |                |
|-------------|----------------|
| a) Cache    | b) HDD         |
| c) Register | d) Main Memory |

(iii) Which one is not present in Von-Neumann Computer?

- |              |                       |
|--------------|-----------------------|
| a) Registers | b) Peripheral Devices |
| c) Cache     | d) None of These      |

(iv) Von-Neumann Computer is also known as

- |                   |                   |
|-------------------|-------------------|
| a) IAS Computer   | b) Batch Computer |
| c) Super Computer | d) All of these   |

(v) Base Register always stores the \_\_\_\_\_

- |                     |                  |
|---------------------|------------------|
| a) Starting Address | b) Size          |
| c) Ending Address   | d) None of These |

(vi) Which one is true for a debugger?

- a) System Software
- b) Application Software
- c) Utility Software
- d) All of this

(vii) Address of the top element of a stack memory is stored in

- a) Program Counter
- b) Base Register
- c) Stack Pointer
- d) None of these

(viii) Which one is responsible to transfer an assembly language into machine language Program?

- a) Assembler
- b) Compiler
- c) Interpreter
- d) All of this

(ix) IR is responsible for

- a) Storing data
- b) Storing address
- c) Storing instruction
- d) None of these

(x) Any web browser like internet explorer, Google chrome is an example of

- a) System Software
- b) Application Software
- c) Utility Software
- d) All of this

(xi) Which one is machine independent?

- a) Machine Level Language
- b) Assembly Language
- c) High Level Language
- d) All of this

(xii) The purpose of limit register is to store

- a) Starting Address
- b) Next Address
- c) Current Address
- d) Size

(xiii) 1 Kilo Byte= \_\_\_\_\_ bits

- a) 1024
- b) 5536

c) 8192

d) 6616

(xiv) Which of the following is not a part of ALU?

a) Arithmetic unit

b) Logical unit

c) Shifter unit

d) None of these

(xv) In Adder-subtractor unit, switch = 0 indicates

a) Addition

b) Subtraction

c) Multiplication

d) Division

(xvi) Which of the basic adder has three inputs?

a) Half Adder

b) Full Adder

c) Both

d) None of these

(xvii) 4 Byte = \_\_\_\_\_ bit?

a) 16 bit

b) 20 bit

c) 26 bit

d) 32 bit

(xviii) Which statement is true for 2's complement method of subtraction?

a) First number will be complemented

b) Second number will be complemented

c) Any one of the numbers can be complemented

d) There is no such method exists

(xix) Which of the following circuit allows only one output among multiple inputs?

a) Gate

b) Multiplexer

c) Decoder

d) Register

(xx) What is the base of binary number system?

a) 8

b) 2

c) 10

d) 16

(xxi) ASCII is how many bit coding scheme?

- a) 5
- b) 6
- c) 7
- d) 8

(xxii) 8245AB6 is in which number system?

- a) Binary
- b) Octal
- c) Hexadecimal
- d) Decimal

(xxiii) What is the base of octal number system?

- a) 2
- b) 8
- c) 10
- d) 16

(xxiv) In which encoding standard, each number is represented by 4 bits?

- a) Binary
- b) BCD
- c) Decimal
- d) Octal

(xxv) Graphics characters are supported by

- a) ASCII
- b) E-ASCII
- c) Both
- d) None of these

(xxvi) What is the size of datatype char?

- a) 2 bytes
- b) 4 bytes
- c) 1 byte
- d) 8 bytes

(xxvii) What is the size of datatype int (32 bit compiler)?

- a) 2 bytes
- b) 3 bytes
- c) 1 byte
- d) 4 bytes

(xxviii) Which one is ternary operator?

- a) >
- b) &&

c) ? :

d) >>

(xxix) What is the size of datatype float?

a) 2 bytes

b) 4 bytes

c) 1 byte

d) 8 bytes

(xxx) The operator %f is applied to

a) integer values

b) Float value

c) double values

d) All of these

(xxxii) Which of the following declaration is invalid?

a) int Name ;

b) int NAmE ;

c) int 2name ;

d) int name ;

(xxxiii) Which of the following is a keyword used for a storage class?

a) printf

b) external

c) auto

d) scanf

(xxxiiii) Which operator has the highest priority?

a) -

b) +

c) =

d) \*

(xxxv) Which symbol is used as a statement terminator in C?

a) ,

b) ;

c) /n

d) /t

(xxxvi) Which is used for single line comment in C?

a) /\* \*/

b) //

c) /

d) %

(xxxvi) A declaration float a,b; occupies total ..... of memory ?

- a) 2 bytes
- b) 4 bytes
- c) 8 bytes
- d) 16 bytes

(xxxvii) Which of the following is not a relational operator?

- a) >>
- b) >
- c) >=
- d) <

(xxxviii) Precedence of operators determines which operator will be

- a) faster
- b) evaluated last
- c) evaluated first
- d) slower

(xxxix) Which operator in C is called a conditional operator?

- a) if..then
- b) ++
- c) ? :
- d) ( )

(xl) else block ..... associated with if block.

- a) always
- b) Not always
- c) Depend on else condition
- d) None of these

(xli) The operator + in a+=4 means

- a)  $a = a + 4$
- b)  $a + 4 = a$
- c)  $a = 4$
- d)  $a = 4 + 4$

(xlii) The argument that are used inside the calling function are called

- a) Actual argument
- b) Formal Arguments
- c) Both Actual argument and Formal Arguments
- d) None of these

(xliii) Executing the same task many times using function, makes the program

- a) compact
- b) lengthy

c) no effect

d) reliable

(xlv) The operator / can be applied to

a) integer values

b) float values

c) double values

d) all of these

(xlv) Which one is considered as an optical media for storage?

a) HDD

b) FDD

c) CD ROM

d) None of these

(xlvi) Which one is not a cache mapping technique?

a) Direct

b) Associative

c) Instruction

d) Set-Associative

(xlvii) If a word cannot be found in cache memory, the incident is called a

a) Cache Miss

b) Cache Hit

c) Cache Coherence

d) Cache Ratio

(xlviii) Which Cache directly interacts with CPU

a) L1

b) L2

c) L3

d) None of these

(xlix) Who stores binary information as a charge applied to capacitors?

a) SRAM

b) DRAM

c) DDRRAM

d) RDRAM

(l) Which access mechanism is the slowest?

a) Associative

b) Direct

c) Random

d) Sequential

(li) Between two successive memory operation, if CPU is busy, then that time is called

- a) Access time
- b) Cycle time
- c) Recovery time
- d) None of these

(lii) If a memory consist of 1024 memory locations, then width of address bus will be

- a) 5
- b) 10
- c) 15
- d) 20

(liii) Which of the following is not a memory management scheme?

- a) Paging
- b) Segmentation
- c) Segmentation with paging
- d) None of these

(liv) Which of the following gives lowest page fault rate?

- a) FIFO
- b) LRU
- c) OPR
- d) All of these

(lv) An address generated by CPU is called

- a) Virtual Address
- b) Physical Address
- c) Logical Address
- d) No name

(lvi) Which of the following is not a type of cache miss?

- a) Compulsory
- b) Capacity
- c) Conflict
- d) None of these

(lvii) In which scheme, memory divided into frames?

- a) Paging
- b) Segmentation
- c) Segmentation with paging
- d) None of these

(lviii) Which access mechanism is also called semi-random access?



- a) Associative
- b) Direct
- c) Random
- d) Sequential

(lix) Belady's Anomaly is possible in

- a) FIFO
- b) LRU
- c) OPR
- d) All of these

(lx) If the capacity of a memory is  $1024 \times 8$ , then it can be considered as

- a) 1KB memory
- b) 2KB memory
- c) 3 KB memory
- d) 4 KB memory

(lxi) External fragmentation is possible in

- a) Paging
- b) Segmentation
- c) Segmentation with paging
- d) Does not exists

(lxii) Which of the following is/are universal logic gate/s?

- a) NAND
- b) NOR
- c) Both NAND and NOR
- d) None of these

(lxiii) Which of the following expression is true for AND gate, if A and B are inputs and O is output?

- a)  $O = A \% B$
- b)  $O = A + B$
- c)  $O = A * B$
- d)  $O = A . B$

(lxiv) Don't care condition is used to simplify Boolean expression in

- a) Registers
- b) K-maps
- c) Latches
- d) Flip flops

(lxv) In Boolean expression, bar sign (-) is used to represent

- a) NOT gate
- b) AND gate
- c) OR gate
- d) All of these

(lxvi) Total number of OR required to implement the expression  $(AB) + (CD)$

- a) 1
- b) 2
- c) 3
- d) 0

(lxvii) Which of the following term/s is/are used in K-map?

- a) Min term
- b) Max term
- c) Both Min term and Max term
- d) None of these

(lxviii)

$(1010110)_2 = (?)_{16}$

- a) 55
- b) 56
- c) 57
- d) 58

(lxix)

$(85)_{10} = (?)_2$

- a) 1010101
- b) 1011111
- c) 1010000
- d) 1100110

(lxx)

What is the output of the following:

```
int i=5;
if(i= 5);
printf("You are right");
else
printf("You are wrong");
```

- a) You are right
- b) You are wrong

c)

Compile time error

d)

No output