DAV PUBLIC SCHOOL, POKHARIPUT, BBSR-20
SUB-COMPUTER SCIENCE
POST SUMMER VACATION TEST – (2021-22)

STD-XI

Time-1 half hour **F.M- 35**

Q1.i) A hardware device that is capable of executing a sequence of instruction is called [6x1]

a) CU

b) Processor

c) CPU

d) ALU

ii). The basic operations performed by a computer are
a) Arithmetic operation
b) Logical operation
c) Storage and relative
d) All the above

iii). A compiler is a translating program which
a) Translates instruction of a high level language into machine language.
b) Translates entire source program into machine language program.
c) It is not involved in program's execution
d) All of above

iv). The term 1 gigabyte refers to
a) 1024 bytes
b) 1024 kilobytes
c) 1024 megabytes
d) 1024 gigabyte

v). Which unit controls various mobile applications in MOS_____

vi)The complement term for X'.Y'.Z + X.Y will be _____
a) XYZ'+X'Y'
b) (X+Y+Z')(X'+Y')
c) (X+Y+Z')(X'+Y)
d) (X+Y+Z')(X'+Y)

Q2.a) Give examples for each of system software and application software. Explain the function of each type? [3x2]

b) What is the role of utility software in the context of computer performance. Write some examples along with its function.

Q3.a) What is the importance of operating system? [2x3]

b) Derive the Demorgan's theorem algebraically (Any one)

c) Write the types and functions of system bus.

Q4. Draw a block diagram depicting organization of a mobile system. [3]

Q5.a) Give some examples of Business software. [4]

b) Discuss some examples on software libraries in Python.

c) Write short notes for the following.

d) i) Blue Ray Disk ii) Mobile system memory

Q6.a) Describe on different types of operating systems. [4x2]

b) Proof the following:

X+YZ= (X+Y) (X+Z)

c) Derive and Proof Distributive's Third Law.

d) Prepare the truth table and draw the circuit diagram for the following Boolean expression.

i) XY'(Z+YZ') +Z' ii) X(Y'+Z') +XY'

Q7.a) Prepare the truth table of XOR [2]

b) Draw the circuit diagram of NAND gate for the following expression.

(X'+Y) (Y+Z')

ALL THE BEST

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