



SRI RAMAJAYAM GLOBAL SENIOR SECONDARY CBSE SCHOOL

MID-TERM EXAMINATION (16.11.2020)

STD: XI

TIME: 1.30 Hour

SUBJECT: COMPUTER SCIENCE

TOTAL MARKS: 50

Question No.	Select the most appropriate option out of the options given for each question.	Marks allocated
1	Which one is not an output Device? a. Monitor b. Keyboard c. Speaker d. Printer	1
2	1 GB = _____ MB	1
3	Which amongst this is not an octal number? a) 645 b) 234 c) 876 d) 123	1
4	The value of radix in Decimal number system is _____ a) 2 b) 8 c) 10 d) 1	1
5	According to Boolean laws: $A + 0 =$ _____? a) 1 b) A c) 0 d) \bar{A}	1
6	According to the associative law: a) $A+B=B+A$ b) $A=A+A$ c) $(A+B)+C=A+(B+C)$ d) $A+0=A$	1
7	Abbrivation of PCB _____ (a) Process Control Bank (b) Process Control Block (c) Process Control Border (d) Process Control Bond	1
8	Which of the following are valid strings in Python? (a) "Hello" (b) 'Hello'" (c) "Hello'" (d) Hello"	1
9	What is the correct definition of an algorithm? a) An algorithm is a step by step instruction to solve a problem. b) An algorithm is a process of baking bread. c) An algorithm is software used to compute numbers. d) An algorithm is the process of breaking problems.	1
10	Identify the following strings which one not a correct one? a) "srgs" b) 'SRGS7' c) ""Srgs"" d) "SRGS'	1

Question No.	Short answer questions of 2 marks each in which two question have internal options.	Marks allocated
11	Define: Hardware & Software.	2
12	Convert $(266)_{10}$ to Octal. (or) Convert $(372)_8$ to Decimal.	2
13	What is a logic gate? Name the three basic logic gates.	2
14	What is cloud computing? Give example. (or) Name the principles/characteristics of Computational Thinking.	2
15	What is meant by token? Name the tokens available in Python.	2
Long answer questions of 3 marks each in which two questions have internal options.		
16	What are various categories of software? Explain.	3
17	Define: i. Binary Number System ii. Octal Number System iii. Decimal Number System iv. Hexadecimal Number System (or) i. Convert the following decimal numbers to binary: 84 ii. Convert the following binary numbers to decimal: 10010 iii. Convert the following octal numbers to binary: 7642	3
18	State a Truth Table for AND, OR, NOT Gates. (or) Write a Full Forms: i. IDLE iv. BBC ii. GUI v. .py iii. RAM vi. ASCII	3

19	<p>Explain given process state diagram.</p> <pre> graph LR Start((Start)) --> Ready((Ready)) Ready --> Running((Running)) Running --> Ready Running --> Wait((Wait)) Wait --> Ready Running --> Terminated(((Terminated))) </pre>	3
20	<p>What will be the sizes of following constants: 'a' '\a' "Rema\'s" "it's" "XY\YZ" 'srgs_school'</p>	3
<p>Very long answer questions of 5 marks each in which one question has Internal option.</p>		
21	<p>a) Convert the following hexadecimal numbers to binary: i) A07 ii) 7AB4 b) Convert $(423)_{10}$ to Hexadecimal. (or) a) Convert $(356)_{16}$ to Decimal. b) Add the following binary numbers: i) 1011101 and 101101 ii) 11110.11 and 1011.01</p>	5
22	<p>Using truth table, prove that: $AB+BC+C\bar{A} = AB+C\bar{A}$ (or) Draw a logical circuit diagram for the following Boolean expression: $F = (A+Y).\bar{(X+Z)}.(Y+Z)$</p>	5
23	<p>Write a correct output of following Python Programming code? (a) <pre> print ("Such as") #print("Take every chance.") print("Drop every fear. ") </pre> (b) <pre> A=20 B=5 C=A*B D=A/B E=A%B print(C) print(D) print(E) </pre> (or) What is Operator in Python? List out the types of operators in python. Explain any 4 types of operators.</p>	5