

KENDRIYA VIDYALAYA SANGATHAN, GUWAHATI REGION
HALF YEARLY - Examination - 2018

SUBJECT : COMPUTER SCIENCE		CLASS :	XI
TIME : 3 HRS.		Max. Marks :	70
Instructions :			
1. All questions are compulsory.			
2. Programming Language to be Python			
Q.1			8
(a)	Give full form of :- EPROM, VDU		1
(b)	1 GB = _____ KB		1
(c)	What are the sub- components of mobile processor ?		1
(d)	Secondary memory is also known as ?		1
(e)	Differentiate between RAM and ROM.		2
(f)	Explain types of software.		2
Q.2			8
(a)	Do the following conversions: i) $(372)_8 = (?)_{10}$ ii) $(FACE)_{16} = (?)_2$ iii) $(10110.0101)_2 = (?)_{16}$ iv) $(43)_8 = (?)_2$		4
(b)	Add the binary numbers i) 111011 and 11 ii) 11.01 and 101.11		2
(c)	Write name of two Indian Script.		1
(d)	Expand UTF		1
Q.3			8
(a)	What is tautology ?		1
(b)	What are universal gates ?		1
(c)	Prove that $X.(X+Y) = X$ algebraically.		2
(d)	State and prove absorption law.		2
(e)	Draw the circuit diagram for :- $A.(B+C')$ using logic gates.		2
Q.4			8
(a)	What is the purpose of registers in CPU ?		1
(b)	What is FCFS ?		1
(c)	What is cloud computing ?		2
(d)	What are the steps in the compilation process ?		2
(e)	What is the difference between linker and loader parts of a compiler ?		2
Q.5			10
(a)	What do you mean by cross platform language ?		1
(b)	What is the error in following Python Program ? Suggest a solution <code>print("Your number is", num)</code>		1
(c)	Write one advantage and one disadvantage of python.		1
(d)	What will be the output of following code : <code>one = "Computer"</code> <code>two = "Science"</code> <code>print(one + two)</code>		1
(e)	Write output for the following :- <code>X=10</code> <code>Y=X+5</code> <code>Z=Y +5</code> <code>print(X,Y,Z)</code>		2
(f)	What are tokens in python ?		2
(g)	What is dynamic typing ?		2

Q.6		10
(a)	What do you mean by term “immutable” ?	2
(b)	What is type promotion in python ?	2
(c)	Write a program in python to find area of rectangle.	2
(d)	Write a program in python to find sum of first natural numbers	2
(e)	Draw a flow chart to find greater number out of two numbers.	2
Q.7		8
(a)	What will be the output of :- S= “Hello World” print(s[:7]) print(s[2:5]) print(len(s)) print(s.isdigit())	2
(b)	Write a python program to enter a name and print like Hello <yourname>	2
(c)	What are compile time errors ?	2
(d)	What is code tracing ?	2
Q.8		10
(a)	What is the difference between append() and extend() function of a list ?	2
(b)	Write a program in python to prepare a list of numbers and sort it.(any method)	2
(c)	Write a program in python to find the maximum value in a tuple.	2
(d)	How are dictionaries different from lists ?	2
(e)	What will be the output :- e={'a':1,'b':2} i) len(e) ii) e.get('b')	2