SEE COMPUTER SCIENCE 2080 MODEL SET 2

Subject: Opt. II Computer Science
Class: 10
Full Marks: 50
Time: 2 hrs.

Candidates are required to write their answers according to the instructions given.
Attempt all questions.

Group 'A' (10×1=10)

1. Answer the following questions in one sentence: (6×1=6)

a) What is search engine?
b) What is the business done through the internet called?
c) What is the default extension of MS-Access?
d) Which object of MS-Access is used to retrieve data from the table?
e) Write any one advantage of Modular Programming.
f) Which is the structured programming language?

2. Write appropriate technical term for the following: (2×1=2)

a) A system of copying data and information reading in computer into another location.
b) A company which provides services of Internet.

3. Write the full form of the following: (2×1=2)

a) POP:
b) AI:

Group 'B' (9×2=18)

4. Answer the following questions:

a) What is computer network? List any two importance of computer network.

b) Write any two advantages and disadvantages of social media.

c) Define software security. Write any two protection measures for it.

d) Define e-commerce. Write the name of any two E-commerce sites.

e) Why mobile computing is necessary in present time? Write any two importance of it.

f) What is database? Give any two examples.

g) What is primary key? Write any two features of it.

h) Define field and record.

i) What type of work is done in MS-Access using form and query object.

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5. Write the output of the given program: Show with dry run in table. (2)

```
DECLARE SUB Result (C$)
C$= "COMPUTER"
CALL Result (C$)
END

SUB Result (C$)
  FOR C=1 TO LEN(C$) STEP 2
    MS=MID$(C$,C,1)
    N$=N$+MS
  NEXT C
  PRINT N$
END SUB
```

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6. Re-Write the given program after correcting the bug: (2)

```
REM to display records from existing file.
OPEN "emp.text" FOR APPEND AS #1
WHILE NOT EOF (#1)
  WRITE #1, eN$, post$, salary$
  PRINT eN$, post$, salary
NEXT
CLOSE #1
END
```

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7. Study the following program and answer the given questions: (2×1=2)

```
DECLARE FUNCTION SUM(N)
CLS
INPUT "Enter any number": N
X=SUM(N)
PRINT "The sum of individual digit is "; X
END

FUNCTION SUM(N)
  WHILE N<>0
    R=N MOD 10
    S=S+R
    N=INT(N/10)
  WEND
  SUM=S
END FUNCTION
```

a) Write the function of INT.
 b) How many times the WHILE…..WEND LOOP repeats if the value of N is 123?

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8. Convert/Calculate as per the instruction: (4×1=4)

i) $(214)_{10} = (?)_2$
ii) $(ABC)_{16} = (?)_2$
iii) $(1011)_2 \times (101)_2$
iv) $(10101)_2 / (11)_2$

9.

a) Write a program in Q-BASIC that asks length and breadth of a room and calculate its area and perimeter. Create a user-defined FUNCTION to calculate area and SUB program to calculate perimeter. [Hint: A=L×B, P=2(L+B)] (4)

b) Students' name, class, section and address are stored in a data file called "STUDENT.DAT". Write a program to print all the records of students. (4)

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10. Write a program in C language that asks any two numbers and displays the greatest among them. (4)

OR

Write a program in C language to display the series 2, 4, 6, 8 up to the 10th term. (4)