

**DIPLOMA – VIEP – COMPUTER SCIENCE AND
ENGINEERING (DCSVI)/ADVANCED LEVEL
CERTIFICATE COURSE IN COMPUTER
SCIENCE AND ENGINEERING (ACCSVI)**

**Term-End Examination
December, 2014**

BICS-030 : 'C' PROGRAMMING

Time : 2 hours

Maximum Marks : 70

Note : *Question no. 1 is compulsory. Attempt four more questions from questions no. 2 to 8.*

1. Choose the correct answer :

7×2

(a) DBMS stands for

- (i) Database Application System
 Extended
- (ii) Database Management System
- (iii) Data Business Management System
- (iv) None of the above

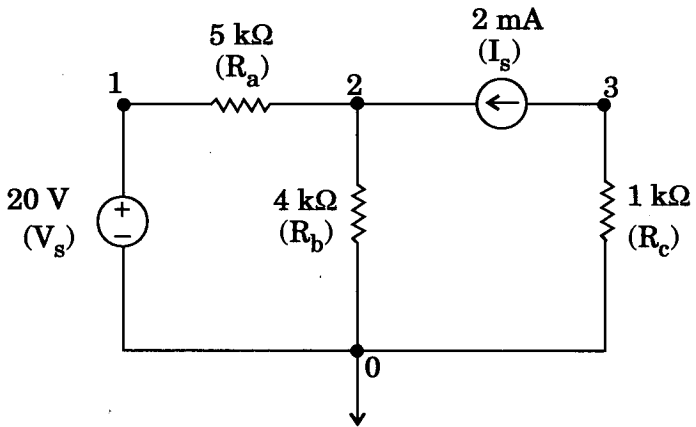
- (b) What will be the output, if you will execute the following 'C' code ?

```
Void main ()  
{  
    int i;  
    (i = 8) + = 1;  
    printf ("%d", i);  
}
```

- (i) 9
(ii) 10
(iii) 32
(iv) 34
- (c) 'C' is a _____ language.
(i) High level
(ii) Low level
(iii) Middle level
(iv) Machine level
- (d) Identify the wrong statement.
(i) putchar (65)
(ii) putchar ('x')
(iii) putchar ("x")
(iv) putchar ('\n')
- (e) An ampersand (&) before the name of a variable denotes
(i) Actual value
(ii) Variable name
(iii) Address
(iv) Data type

- (f) SQL stands for
- (i) Structured Query Language
 - (ii) Sequential Queue Language
 - (iii) Sequential Query Language
 - (iv) Standard Query Language
- (g) Unique and NOT NULL properties are in :
- (i) Primary Key
 - (ii) Foreign Key
 - (iii) Unique Key
 - (iv) Candidate Key
2. (a) Discuss various data types in 'C' language. 6
- (b) Write a program to find the largest number among three numbers using conditional operators. 8
3. (a) Does if-else statement differ from switch-case statement ? Which statement is better and why ? 3+4
- (b) What is a string ? How is a string represented or stored in the memory ? 3+4
4. (a) How are the following terms distinct from each other :
- (i) Primary Key
 - (ii) Candidate Key
 - (iii) Super Key 6
- (b) How is DBMS different from traditional file system ? Also, write the advantages of DBMS. 4+4

5. (a) What is the basic difference between commercial and business data processing applications ? Explain with an example. 5+3
- (b) Explain any three Engineering Computation Techniques. 6
6. (a) What are the different softwares available in the field of electrical engineering and how are they helpful in designing and analysis of a circuit ? 3+5
- (b) Using this circuit, solve the bare-bones minimum problem using PSpice/Matlab/Simulink. 6



7. Consider the following schema :

Employee (Empid, Ename, Depid, Did)
Dept (Did, Dname)

Dependant (Depid, Depname, Empid)

- (a) Write an SQL Query to delete the values from Dependant table where Empid = 234. 4
- (b) Write an SQL Query to add new column "Salary" with number data type and 5 data size. 5
- (c) Write an SQL Query to sort the Did in descending order. 5
8. Write short notes on any *four* of the following :
- $4 \times 3 \frac{1}{2} = 14$
- (a) CAD (Computer Aided Design)
- (b) CAE (Computer Aided Engineering)
- (c) Array
- (d) Foreign Key
- (e) Identifiers in 'C'
- (f) Attributes
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