

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

```

DECLARE SUB test (a, b)
CLS
x = 4: y = 6
CALL test(x, y)
PRINT x, y
END
=====

```

```

SUB test (p, q)
FOR i = p TO q
    p = p + q
    q = q + p
NEXT i
END SUB

```

- What is the output of the above program?
- If `CALL test(x,y)` is modified as `CALL test(x, (y))`, then what will be the output?

15. a) Write a program to display the below output using a **SUB** procedure. (3)

```

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```

- Write a program that asks Principal Amount (P), Time (T) and Rate of Interest (R) and calculates the Total Amount (T) using a **FUNCTION** procedure. Total Amount (T) = P(Principal Amount) + I (Simple Interest) (3)
- A sequential data file "`class.dat`" has several records with fields students' name, roll and class. Write a program that reads all the records and displays only those records whose roll number is less than 10. (3)

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For model answer: [www.brushuponline.edu.np](http://www.brushuponline.edu.np)  
 Inquiry: [exam@brushuponline.edu.np](mailto:exam@brushuponline.edu.np)



## SLC Brush-Up Exam - 2011

Round: #1	Set: B
Subject: Computer Science	Full Marks: 50
Time: 1:30 Hours	Pass Marks: 20

Candidates are required to give their answer in their own words as far as practicable.

### Group 'A' [Fundamentals - 22 marks]

- Answer the following question: (5×2=10)
  - "Computer network reduces cost". Give any two points to support this statement.
  - What is computer security? Mention any two software security measures.
  - Define e-commerce and Internet telephony.
  - What is antiviral software? Name any two types of virus.
  - What is cyber law? Write any two ethical values for computer operators.
- Perform the following Binary calculation: (2×1=2)
    - $(101) \times (11) + (1101)$
    - $110101 \div 111$
  - Perform as indicated: (2×1=2)
    - $(10101110)_2$  into Decimal
    - $(A5B)_{16}$  into Octal
- Select the correct answer: (4×0.5=2)
  - It allows user to make communication with each other in real time ----- .
    - Browsing
    - IRC
    - E-Mail
    - None
  - Cyber law refers to the laws regarding the ----- .
    - Hardware & Software
    - Computer system
    - Internet & Cyberspace
    - Computer Programmer
  - Which is the network operating system?
    - MS-DOS
    - Windows 7
    - MS-UNIX
    - Windows NT
  - An example of anti-virus is ----- .
    - PC-tool
    - Smart Editor
    - MCAfee
    - DAP
- Write the full form of the following: (4×0.5=2)
 

a) UTP	b) MAC	c) ASCII	d) HTTP
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- Match the following: (4×0.5=2)
 

Group A	Group B
a) Hub	(i) Amplifies the incoming signals and creates a new copy of it
b) Router	(ii) Broadcasts the signals to all the connected node
c) Repeater	(iii) Multicast network device
d) Gateway	(iv) Forwards the request to the appropriate network
	(v) Connects to the outer network

6. Give the appropriate technical terms of the following: (4×0.5=2)
- A program that corrupts useful data and programs.
  - A device that connect two different networks.
  - A business through Internet.
  - The scattering of the parts of the same disk file over different locations.

**Group 'B'**

**[Database Management - 10 Marks]**

7. Answer the following question: (3×2=6)

- List any four features of MS-Access.
- What is the importance of Query in database?
- Mention any four options that field properties pane consists.

8. Choose the correct answer [Choose all that apply]: (4×0.5=2)

- Which is/are data type(s) of MS-Access?
  - Memo
  - Hyperlink
  - Word
  - Lookup Wizard
- Memory Space used by Auto Number data type is ----- .
  - 1 Byte
  - 2 Bytes
  - 4 Bytes
  - 8 Bytes
- The primary key can not contain ----- value.
  - Null
  - No Null
  - Number
  - Auto Number
- MS-Access supports ----- types of data.
  - 7
  - 8
  - 9
  - 10

9. Match the following: (4×0.5=2)

Group A

- Table
- Memo
- Sort Query
- One to One

Group B

- Relationship
- Information on one subject
- Report
- Data Type
- Easy to search

**Group 'C'**

**[Programming - 18 Marks]**

10. a) List any two advantages of modular programming. (1)  
 b) Write down any two features of C language. (1)

11. Write down the function of the following statements: (2×0.5=1)

- KILL**
- DATE\$ statement**

12. Write the output of the following program. (2)

```

DECLARE SUB Show (N)
CLS
FOR I = 1 TO 5
    READ N
    CALL Show(N)
NEXT I
DATA 21,15,81,20,42
END
=====
SUB Show (N)
X = N MOD 3
X1 = N MOD 5
IF X = 0 AND X1 <> 0 THEN PRINT N;
END SUB
  
```

13. Re-write the given program after correcting the bugs. (2)

```

REM to check the number palindrome or not
DECLARE SUB check (n)
CLS
INPUT "Any number "; n
CALL check(n)
END
=====
SUB check (x)
x=a
WHILE x <> 0
    r = x MOD 10
    s = s + r *10
    x = x - 10
WEND
IF x = s THEN
    PRINT "Palindrome"
ELSE
    PRINT "Not Palindrome"
END IF
END SUB
  
```