SOF
SCIENCE OLYMPIAD FOUNDATION

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SOF NATIONAL CYBER OLYMPIAD

Total Questions : 50   Time : 1 hr.

PATTERN & MARKING SCHEME			
Section	(1) Logical Reasoning	(2) Computers & IT	(3) Achievers Section
No. of Questions	10	35	5
Marks per Ques.	1	1	3

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

Section – 2 : Algorithms and Flowcharts in Programming, Number System (Binary to decimal and decimal to binary conversion), Visual Basic, Animations, HTML & CSS (Links, Anchors and Table tags), MS-Word, MS-Excel(Formula Auditing, Data Tools, Protecting and Sharing workbooks/worksheets, Working with cell range), MS-PowerPoint, Hardware, Software, Input & Output Devices, Memory & Storage Devices, Flash CS6, Communication Technology (Networking, Internet and Multimedia),Operating Systems(Types-Interactive (GUI based), Real Time and Distributed, Commonly used OS), Using Windows 10, Introduction to Scratch, Introduction to Python 3.11 (as of December 2022), Latest Developments in the Field of IT.
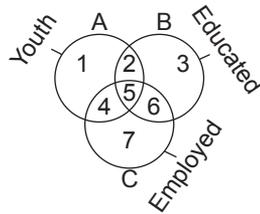
Section – 3 : Higher Order Thinking Questions - Syllabus as per Section – 2.

Questions are based on Windows 10 and MS-Office 2016.

LOGICAL REASONING

1. Study the diagram below and identify the region representing youth who are unemployed but educated.
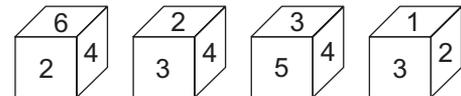
(A) 2 only

(B) 1, 2, 3

(C) 1, 3

(D) 1, 2

2. In a certain code language,
(I) 'pit dar na' means 'you are good';
(II) 'dar tok pa' means 'good and bad';

(III) 'tim na tok' means 'they are bad'.
In that language, which word stands for 'they'?
(A) na   (B) tok
(C) tim   (D) pit

3. Four different positions of a dice are shown below. Find the number on the face opposite to the face showing 2.

(A) 3   (B) 4
(C) 5   (D) 6

COMPUTERS AND INFORMATION TECHNOLOGY

4. What is the binary representation of decimal number 25?
(A) 01010101   (B) 00011001
(C) 11001100   (D) 01100110

5. _____ of File Explorer shows the path of the currently selected folder in Windows 10.
(A) Address bar   (B) Status bar
(C) Search box   (D) None of these

6. In Visual Basic _____ control is used to accept input from user as well as displays the output.
(A) Command   (B) Shape
(C) Timer   (D) TextBox

7. Which of the following options makes it possible to scroll two documents at the same time in MS-Word 2016?
(A) Simultaneous Scrolling
(B) Synchronous Scrolling
(C) Parallel Scrolling
(D) View Scrolling

8. _____ are type of computer viruses that stores themselves within memory.
(A) Resident viruses
(B) Memo viruses
(C) Trojan Horse
(D) None of these

9. What would be the output of the given HTML code?
```
<html>
<body>
<ol>
    <li> NCO </li>
    <li> NSO </li>
    <li> IMO </li>
</ol>
</body>
</html>
```

(A) I. NCO   (B) 1. IMO
     ii. NSO   ii. NSO
     iii. IMO   iii. NCO

(C) 1. NCO   (D) 1. NCO
     2. NSO   i. NSO
     3. IMO   ii. IMO

10. Which of the following codes will add two numbers and display the sum in TextBox1 in Visual Basic? (Assume that the Name property of the TextBox is Text1)

(A) Private Sub Command1_Click ( )
```
Dim Num1, Num2, Result As Int
Num 1 = 5;
Num 2 = 8;
Result = Num1 + Num2;
Text1.Val = Result;
End Sub
```

(B) Private Sub Command1_Click ( )
```
Dim Num1, Num2, Result As Integer
Num1 = 5
Num2 = 8
Result = Num1 + Num2
Text1.Text = Result
End Sub
```

(C) Private Sub Command1_Click ( )
```
Dim Num 1, Num 2, Result as Integer
Result = Num 1 + Num 2
Text1.Val = Result
End Sub
```

(D) Private Sub Command1_Click ( )
```
Dim Num1, Num2, Result As Int
Num1 = 5;
Num2 = 8;
Result = Num1 + Num2;
Val (Text 1. Text) = Result
End Sub
```

SPACE FOR ROUGH WORK

ANSWERS

NCO –   1. (A)   2. (C)   3. (C)   4. (B)   5. (A)   6. (D)   7. (B)   8. (A)   9. (C)   10. (B)