

SOF NATIONAL CYBER OLYMPIAD

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

Section – 2 : Programming in C++, Database Concepts, SQL, Boolean Algebra, MS-Word, MS-Excel, HTML, Networking & Topologies, Network Security Concepts, Cyber ethics, Viruses and Antiviruses, Open Source Terminologies.

Section – 3 : Higher Order Thinking Questions - Syllabus as per Section – 2.

Questions are based on Windows 7 and MS-Office 2010.

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

LOGICAL REASONING

1. If \times stands for 'addition'; $<$ stands for 'subtraction'; $>$ stands for 'multiplication'; \div stands for 'division'; $=$ stands for 'equal to'; \div stands for 'greater than'; $=$ stands for 'less than'; then which one of the given alternatives is correct ?
- (A) $8 < 4 \times 3 - 3 \times 2 \times 1$
 (B) $8 > 4 < 3 - 3 > 2 < 1$
 (C) $8 \times 4 < 3 \div 3 < 2 < 1$
 (D) $8 + 4 \times 3 \div 3 > 2 \times 1$



2. Which one of the following Venn diagrams represents the relationship amongst "Musicians, Instrumentalists and Violinists"?

3. In a certain code language, 'nee muk pic' means 'grave and concern', 'ill dic so' means 'every body else' and 'tur muk so' means 'body and soul'. Which of the following would mean 'every concern'?
- (A) dic pic (B) pic nee
 (C) ill nee
 (D) Cannot be determined

COMPUTERS AND INFORMATION TECHNOLOGY

4. Which of the following benefits are offered by Homegroup Networking feature in Windows 7?
- (A) Easy sharing of libraries and other files throughout the homegroup in Windows Explorer.
 (B) Easy access to shared media libraries in Windows Media Player and Windows Media Center.
 (C) Ability to stream media to devices (other computers, media extenders and players, digital picture frames, and so on) using Play To.
 (D) All of these

6. In OSI layer, end-to-end connectivity is provided from host-to-host in _____.
- (A) Data link layer (B) Session layer
 (C) Network layer (D) Transport layer

5. _____ is a device that will only send a message to the device that needs or requests it rather than broadcasting it to all devices.
- (A) Router (B) Hub
 (C) Switch (D) Modem

7. _____ is a method of encryption that provides two different keys, a secret key and a public key.
- (A) Symmetric encryption
 (B) Asymmetric encryption
 (C) Authentication
 (D) Detection

8. Aero shake feature of Windows 7 requires _____ shakes only in order to perform the task.
- (A) 3 (B) 2
 (C) 10 (D) 7

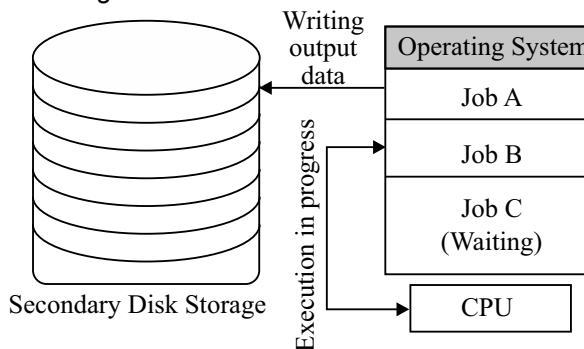
ACHIEVERS SECTION

9. Which of the following is/are advantage(s) of Cyber Laws under IT Act of India 2000?

1. Digital signatures have been given legal validity and sanction in the Act.
2. It now allows Government to issue notification on the web thus heralding e-governance.
3. It also addresses the important issues of security, which are so critical to the success of electronic transactions.
4. It shall now be possible for corporates to have a statutory remedy in case if anyone breaks into their computer systems or network and causes damages or copies data. The remedy provided by the Act is in the form of monetary damages, not exceeding ₹ 1 crore.

- (A) Only 1 and 2 (B) Only 2 and 4
(C) 1, 2, 3 and 4 (D) 1, 3 and 4

10. Identify the type of system with the help of given diagram.



- (A) Multiprogramming system
(B) Multiprocessing system
(C) Batch-processing system
(D) Uniprogramming system

SPACE FOR ROUGH WORK

ANSWERS

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