

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) Logical Reasoning	(2) Computer Science	(3) AI, Robotics and Information Technology	(4) Achievers Section
No. of Questions	10	30	5	5
Marks per Ques.	1	1	1	3

SYLLABUS**Section – 1 :** Verbal and Non-Verbal Reasoning.

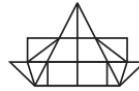
Section – 2 : Fundamentals of Computer (Hardware, Software, I/O Devices, Animation & Multimedia, Memory and Storage Devices, Number System(binary to decimal and decimal to binary conversion)), Introduction to Visual Basic, HTML & CSS (Links, Anchors and Table tags and Some More Advanced Tags), MS-Word, MS-Excel (Formula Auditing, Data Tools, Protecting and Sharing workbooks/worksheets, Working with cell range), MS-Access, MS-PowerPoint, Networking, Cyber Safety, Operating Systems (Types-Interactive (GUI based), Real Time and Distributed, Commonly used OS), Using Windows 11, Programming in Scratch, Introduction to Python 3.13 (as of December 2024).

Section – 3 : AI, Robotics, IT Gadgets, Devices, Apps, Computerization, and other Developments in the Field of IT.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Sections 2 and 3.

Questions are based on Windows 11 and MS-Office 2016.

LOGICAL REASONING

- Select a figure from the options which is exactly embedded in the given figure as one of its parts.
 (A) (B) (C) (D)
- Find the number of triangles formed in the given figure.
 (A) 18 (B) 19 (C) 20 (D) More than 20

- There is a certain relationship between the pair of terms on the either side of ::. Identify the relationship between the given pair and find the missing term.

HWTK : SRGF :: PSEN : ?

- (A) KNVI (B) KIVM (C) KXJI (D) KNVJ

COMPUTER SCIENCE

- Which of the following options can be included in the multimedia?
 (i) Text (ii) Sound (iii) Animation
 (iv) Videos (v) Graphics
 (A) (i), (iii) and (v) only (B) (ii), (iii) and (iv) only
 (C) (ii), (iv) and (v) only (D) (i), (ii), (iii), (iv) and (v)

5. Identify the following networking device.

- The main function of this device is to regenerate an incoming signal from the sender before transmitting it to the receiver.
 - It can extend the range of the network by boosting the signal and reducing the error and loss of data.
- (A) Repeater (B) Bridge (C) Switch (D) Router

6. What would be the output of the following Python program?

```
X = 8  
X = "Computer Science"  
print(X)
```

(A) 8 Computer (B) Computer Science
(C) 8, ComputerScience (D) 8

AI, ROBOTICS AND INFORMATION TECHNOLOGY

7. Identify the following .

- It is an online, cloud-based photo storage system released by Google in 2015.
- It allows users to upload photos and videos that can be accessed and edited on multiple platforms using a Google account.



8. In AI, _____ are loosely modelled after how neurons in the human brain behave and they are able to extract data features automatically without needing the input of the programmer.

- (A) Neural networks (B) Problem scoping
(C) Data exploration (D) Data acquisition

ACHIEVERS SECTION

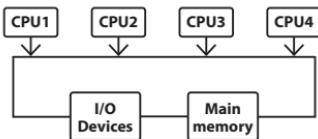
9. Identify the following:

- It acts as an entry node for other network nodes.
- It connects two dissimilar networks.
- It is also called as a proxy server.

(A) Router (B) Bridge (C) Gateway (D) Switch

10. Select the incorrect statement about the type of operating system whose diagram is depicted in the given image.

- (A) If one processor fails in such OS, then execution of processes can be done with another processor.
(B) Such OS increases the throughput of the system.
(C) Computers installed with such kind of OS, runs very slow.
(D) UNIX and LINUX are examples of such OS.



ANSWER KEY

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