



**PERIODIC TEST I (APRIL, 2023)**

**INFORMATICS PRACTICES (065)**

**GRADE- XII**

**TIME: 1:30 hrs.**

**M.M.: 40**

**General Instructions:**

- Read the questions carefully.
- All questions are compulsory.
- Attempt your paper in neat and clean handwriting.

**Q1. Answer the following questions in one word or sentence.**

**(10X1=10)**

1. Write one drawback of interactive mode.
2. What is the use of bridges in a network.
3. Through .....you can establish contact with anyone in the world.
4. Hub is associated with ..... network.
5. Which networking device with similar functionality can be used to replace the hub?
6. Define the role of the Web Browser.
7. Ananya purchased 5 pencils and 2 erasers at the cost of Rs 7 and Rs 5 respectively. Write the program to calculate & display the total amount paid by ananya.

8. Which symbols are used for single line comments and multiple line comments?
9. What is the difference between packet switching and circuit switching techniques?
10. Write two advantages of using an optical fibre cable over an ethernet cable to connect two service stations, which are 200m away from each other.

**Q2. Application Based and Assertion Reason Questions: (4X2=8)**

**A) Consider the following code and predict the output:-**

**a, b, c, d = 10, 27, 4+5, 10-7**

**a//d**

**d\*\*d**

**b/c**

**a+b+c-d**

**B)** Ravi is a class IX student, has just started understanding the basics of Internet and web technology. He is a bit confused between the term 'World wide Web' and 'Internet'. Help him understand both the terms giving suitable examples of each.

**C) Assertion(A):-**ARPANET was the first computer network created in 1969

Reason(R):- The objective of creating ARPANET was to develop a reliable communication network.

a) both Assertion(A) and reason(R) are true and reason is the correct explanation of assertion(A)

b) both Assertion(A) and reason(A) are true and reason is not the correct explanation of Assertion(A)

c) Assertion(A) is true and reason(R) is false.

d) assertion(A) is false and reason(R) is true.

**D) Assertion(A):-**A repeater is a device that amplifies the network over geographical distance.

Reason(A):-A hub is a device which is used to connect more than one device in the network .

(a) both Assertion(A) and reason(R) are true and reason is the correct explanation of assertion(A)

(b) both Assertion(A) and reason(A) are true and reason is not the correct explanation of Assertion(A)

(c) Assertion(A) is true and reason(R) is false.

(d) assertion(A) is false and reason(R) is true.

### **Q3 Short Answer type Question**

**(4X2=8)**

A. What is the use of Repeater in a network?

- B. How is a Trojan Horse harmful to a network?
- C. Rajlakshmi is a class 12 computer science student. She is confused between 'web' and 'internet'. As a friend of Rajlakshmi, explain her the difference between web and internet.
- D. Identify the following
1. I am a networking device used to connect multiple computers I sends the data to only intended node.
  2. I serves as the entry and exit point of a network.
  3. If a node from one network wants to communicate with a node of a foreign network, it will pass the data packet through me.
  4. I am a wireless device which provide Wi-Fi access to smartphones and other devices

**Q4. Long Answer Type Questions:-**

**(2\*3=6)**

- 1) Define operators. Explain types of operator with flow chart
- 2) Write the steps to host a website

**Q5. Case based Questions:-**

**(2\*4=8)**

- 1) The following sentence describes the term web browser.

Web browsers are programs used to explore the (i)..... . Web browser is an interface that helps a computer user gain access to all the content that is on the Internet and hard disk of the computer.

It can view (ii)....., text documents, audio and video files games etc. more than one (iii)..... can also be installed on a single computer. The user can navigate through files folder and(iv)..... with the help of Browser when the

browser is used to browsing(v)....., the pages may contain certain link with which can be opened in a new browser. Multiple tabs and Windows of the same browser can also be opened. An example of web browser is (vi).....

Fill the blanks with words from the list given below:

Internet, TCP, Images, Web browser, Photo, Websites, SMTP, Web pages

2) Rovenza Communication International (RCI) is an online corporate training provider for IT-related courses. The company is setting up their new campus in Kolkata. You, as a network expert, have to study the physical locations of various blocks and the number of computers to be installed. In the planning phase, provide the best possible answers for the queries (a) to (d) raised by them.

**Block-to-Block distance (in meters):**

<b>From</b>	<b>To</b>	<b>Distance</b>
Administrative Block	Finance Block	60
Administrative Block	Faculty Recording Block	120
Finance Block	Faculty Recording Block	70

**Expected Computers to be installed in each block:**

<b>Block</b>	<b>Computers</b>
Administrative Block	30
Finance Block	20
Faculty Recording Block	100

- a) Suggest the most appropriate block where RCI should plan to install the server.
- b) Suggest the most appropriate block-to-block cable layout to connect all three blocks for efficient communication.
- c) Which type of network out of the following is formed by connecting the computers of these three blocks?
- (i) LAN                      (ii) MAN                      (iii) WAN
- d) Which wireless channel out of the following should be opted by RCI to connect to students from all over the world?
- (i) Infrared                      (ii) Microwave                      (iii) Satellite