

# GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY :: NELLORE Department of Computer Science and Engineering

Name of the Subject	Computer Networks	Class	III Year I Sem
Faculty Name	V. Gayatri	AY	2019-20

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#### NPTEL Videos

#### Introduction:

The National Programme on Technology Enhanced Learning (NPTEL), a project funded by the (MHRD), provides e-learning through online Web and Video courses in Engineering, Sciences, Technology, Management and Humanities.

It is a website where regular courses from reputed institutions like IITs, NITs and IISc are hosted for free.

Students can get lectures starting from basic sciences to specific engineering disciplines.

Basically this is a platform where students can learn from various IIT professor for free.

There is also an youtube channel where all these videos have been hosted.

### Topic:

• IP Addressing(IPv4)

### Objective of the activity:

 To enhance skills and gain essential knowledge required for student's field or brushing up the basic key concepts

### **Execution Plan:**

• Given assignment questions to answer based on the topic of the video link that is sent.

### **Expected Outcomes:**

The students can be able to

- Understand about IP Addressing
- Identify class of IP address for given IP addresses.
- Understand about Subnetting and Supernetting.

#### **Enclosures:**

1. YouTube link for NPTEL video of topic IP Addressing.

### https://www.youtube.com/watch?v=5vbPS-KnhvI

### 2. Assignment Questions given to students

### Question 1:-

The 14.23.120.8 address lies in which class

- A. class a
- B. class b
- C. class d
- D. class e

### Question 2:-

Your router has the following IP address an Ethenet0: 172.16.2.1/23. Which of the following can be valid host IDs on the LAN interface attached to the router?

- 1.172.16.1.100
- 2. 172.16.1.198
- 3. 172.16.2.255
- 4. 172.16.3.0
  - 1. 1 only
  - 2. 2 and 3 only
  - 3. 3 and 4 only
  - 4. None of the above

### Question 3:-

An organization requires a range of IP addresses to assign one to each of its 1500 computers. The organization has approached on Internet Service Provider (ISP) for this task. The ISP uses CIDR and serves the requests from the available IP address space 202.61.0.0/17. The ISP wants to assign an address space to the organization which will minimize the number of routing entries in the ISP's router using route aggregation. Which of the following address spaces are potential candidates from which the ISP can allot any one to the organization?

1. 202.61.84.0/21

II. 202.61.104.0/21

III. 202.61.64.0/21

IV. 202.61.144.0/21

- 1. I and II only
- 2. II and III only
- 3. Ill and IV only
- 4. I and IV only

#### Question 4:-

You are working with a network that is 172.16.0.0 and would like to support 600 hosts per subnet. What subnet mask should you use?

- 1. 255.255.192.0
- 2 255 255 224 0
- 3. 255 255 252 0
- 4. None of the options

#### Question 5:-

Consider three machines M, N, and P with IP addresses 100.10.5.2, 100.10.5.5, and 100.10.5.6 respectively. The subnet mask is set to 255.255.255.252 for all the three machines. Which one of the following is true?

- 1. M, N, and P all belong to the same subnet
- 2. Only M and N belong to the same subnet
- 3. Only N and P belong to the same subnet
- 4. M, N, and P belong to three different subnets

### 3. Photos during activity





## Important observations

- All the students not watched video that is sent.
- Few students were able to answer assignment questions.

Faculty Signature