**Lesson Plan Form**

**Course Title: Computer Networks**

**Course Code: ETE-331**

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| Title: **Routing Protocol** | | | Ref. No:  **ETE 331/14** | |
| Target Population: **25** | | | Duration  **90 minutes** | |
| Aims/Rationale: **After completing this lesson students will be able to learn the basics concepts of routing. A routing protocol specifies how routers communicate with each other, disseminating information that enables them to select routes between any two nodes on a computer network. Routing algorithms determine the specific choice of route and develop routing tables. Some of the most popular routing protocols consist of RIP, IGRP, EIGRP, OSPF, BGP and IS-IS.** | | | | |
| **Learning Outcomes: At the end of the session participant will be able to :**  **1. Understand the routing basic concept.**  **2. Describe the primary functions and features of a router.**  **3. Describe the Routing Classifications.**  **4. Explain how routers use information in data packets to make forwarding decisions in a small to medium sized network.**  **5. Compares ways in which a router builds table when operating in a small to medium sized business network.** | | | | |
| **Content** | Method or Technique | Resource or Aid | | Time |
| Introduction: **Welcome address**  **Rapport building**  **Bridging topic**  **Layout/ content outline**  **Attendance**  **Pre-assessment** | **Lecture**  **Q/A** | **W/B** | | **10 minutes** |
| Development:  Section-A  **Definition of routing protocol.**  **Describe the primary functions and features of a router.**  Section-B  **Functions of Router:**   * **Why Routing?** * **Routers are computers** * **Router Interconnects networks** * **Router Choose best path** * **Packet Forwarding Methods**   Section-C  **Describe the Routing classifications.**  **Explain the Static and Dynamic Routing.**  Section-D  **Connect Devices**   * **Connect to a network** * **Default Gateways** * **Document Network Addressing** * **Enable IP on a host** * **Console Access** * **Enable IP on a Switch**   **Configure Basic Router Settings**  **Configure a loopback interface**  **Verify Interface Settings**  **Command History Feature**  **Routing Table Sources** | **Lecture**  **Discussion**    **Do**      **Do**        **Do** | **W/B**  **MMP**  **Video** | | **10 minutes**  **20 minutes**      **15 minutes**        **25 minutes** |
| Conclusion:  **Recap main points**  **Feedback & answer**  **Assessment of LOs**  **Reference**  **Forward plan** | **Lecture**  **Discussion**  **Q/A** |  | | **10 minutes** |
| Equipment & aids: **Optional** | | | | |