Interactive Session Activities - Chapter 08 and Chapter 9

In-Class Activities – Answers

1. **"Working with information systems can be a rewarding career choice since it contains two main career paths such as technical track and the management track". Explain these two career paths with a few examples.**

   Technical Track

   The technical track emphasizes the technical aspect of information systems where primarily engaged in designing, developing, maintaining, and troubleshooting various information systems.

   Examples

   1. Software Developer/Engineer: These professionals design, code, and test software applications. They work with programming languages, databases, and frameworks to create software solutions that meet user needs.

   2. Systems Analyst: Systems analysts evaluate an organization's current systems and procedures and recommend improvements. They analyze requirements, design solutions, and often act as a bridge between business needs and technical implementation.

   3. Network Administrator: Network administrators are responsible for the day-to-day operation of computer networks. They manage network hardware, software, and security, ensuring that networks are efficient and reliable.

   4. Database Administrator (DBA): DBAs manage databases to ensure they are available, perform well, and are secure. They work on database design, backup and recovery, and performance tuning.

   5. Cybersecurity Analyst: These professionals protect an organization's information systems from cyber threats. They monitor networks for security breaches, investigate incidents, and implement security measures.

   Management Track

   The management track is focused on coordinating activities related to information systems within an organization. They are doing related to strategic planning, project management, and aligning technology initiatives with business objectives.

   1. Chief Information Officer (CIO): A CIO is a high-level executive responsible for the overall technology strategy of an organization. They ensure that IT investments align with business objectives and often oversee large teams of IT professionals.

   2. IT Manager: IT managers oversee the IT department's operations, ensuring that Information systems and technology run smoothly. They manage budgets, projects, and teams, and often liaise between IT staff and other departments.

   3. Project Manager: Project managers in information systems lead projects from

inception to completion. They plan, execute, and close projects, managing resources, timelines, and stakeholder communications.

4. Business Analyst: Business analysts work at the intersection of IT and business. They analyze business needs, recommend technological solutions, and ensure that IT projects meet business objectives.

5. Information Systems Manager: These managers oversee the implementation and maintenance of an organization's information systems. They ensure systems are secure, efficient, and aligned with the company's goals.

2. **What are the emerging roles that are becoming in the information technology field?**

The information technology (IT) field is rapidly evolving, giving rise to numerous new roles. These roles are driven by technological advancements, evolving business requirements, and the increasing emphasis on data and security. Here are some of the emerging positions in the IT landscape:

- Data Scientist

- Artificial Intelligence (AI) Engineer

- Cybersecurity Specialist

- Cloud Architect

- Blockchain Developer