

#### ADMISSION NUMBER

K3 (6)

# **School of Business**

Bachelor of Business Administration Mid Term Examination - May 2024

Duration: 90 Minutes Max Marks: 50

## Sem II - D1UA208B - IT Tools for Decision Making

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

- 1) In what way does the HLOOKUP function differ from the VLOOKUP K2 (6) function?
- You are a technology historian tasked with educating a group of high school students about the fascinating history of the Internet and its development phases. To make the session engaging and interactive, you decide to craft a scenario-based question to spark curiosity and encourage critical thinking among the students.

#### Question:

Imagine you are transported back in time to the early 1960s, and you find yourself in the shoes of J.C.R. Licklider, the visionary scientist who laid the groundwork for the Internet. As Licklider, you are about to embark on your journey to conceptualize a worldwide network of interconnected computers.

- A) Explain the pivotal moments and key milestones you encounter as you navigate through the development phases of the Internet, from its humble beginnings to its widespread adoption in modern times.(4)
- B) How would you articulate your vision to fellow researchers and policymakers, and what challenges do you anticipate along the way? (4)
- 3) Explain the concept of bandwidth in networking.
- 4) Explain and List three types of transmission media.

  K4 (4)

Imagine you are tasked with designing a wireless network for a large corporation that spans across multiple floors of a high-rise building. The company requires seamless connectivity for its employees to access critical data and applications. Considering the complexity of the infrastructure and the need for reliable wireless transmission media, you need to address various aspects of wireless communication.

K3 (9)

- A) Recall the characteristics of different types of wireless transmission media. (3)Marks
- B) What are the main features of radio waves, microwaves, and infrared waves in wireless communication? (3)Marks
- C)How do they differ in terms of frequency, range, and susceptibility to interference? (3)Marks

6) Scenario: K4 (12)

In a bustling metropolis, a newly established technology startup is gearing up to revolutionize the way people interact with their environment through augmented reality (AR) glasses. The company's flagship product promises seamless integration of digital information into the real world, offering users an immersive experience unlike any other.

The team is fervently working on perfecting their prototype, but they've encountered a critical hurdle: selecting the most suitable transmission media to ensure smooth data transfer between the AR glasses and the cloud-based servers where the augmented reality content is hosted.

## Question:

- a) As a consultant hired to advise the startup on their transmission media selection, how would you guide them through this crucial decision-making process? Consider factors such as bandwidth, latency, reliability, security, and scalability in your recommendation.(6)
- b) Propose specific transmission media options (e.g., fiber optics, wireless communication protocols, etc.) that align with the requirements of their AR glasses technology.(6)
- 7) Define memory hierarchy and explain its importance in computer K5 (5) systems.