

QUESTION BANK

FUNDAMENTAL OF COMPUTER AND EMERGING TECHNOLOGIES-KCA-101

UNIT 1

1. Distinguish Between Multiprogramming and Multiprocessing Systems.
2. Describe any three types of Scanner.
3. Distinguish Between Compiler and Interpreter.
4. What is difference between Application Software and System Software?
5. Write a notes on Assembler.
6. Draw Block Diagram of Computer.
7. Define Algorithm in detail.
8. Draw a flowchart for the algorithm to calculate and print the percentage marks obtained by each student along with his/her roll number and name.
9. Explain pseudo-code with a suitable example.
10. Write an algorithm to find largest of three numbers.

UNIT 2

1. Define Function in brief.
2. Explain data communication in brief.
3. Compare GUI with CLI.
4. What is a network topology, and why is it crucial in designing a computer network?
5. What is Operating system and explain the services provided by it.
6. Define network topology with detail and explanation of its types.
7. What is computer network? What do you understand by LAN, MAN and WAN explain with example.
8. Compare and contrast the characteristics of a star topology and a ring topology. In what scenarios would each be most suitable?
9. Explain the concept of a mesh topology and highlight its advantages and disadvantages in terms of redundancy and scalability.
10. How does a bus topology differ from a tree topology, and what are the practical considerations when choosing between them in a network design?

UNIT 3

1. Write a short note on the concept of Internet of things.
2. Explain the function of web browser in short.
3. Describe basic services of Internet.
4. Explain historical development of Internet.
5. Discuss IOT reference model with the help of a diagram.
6. Briefly explain about FTP.
7. Briefly explain about Telnet.
8. Briefly explain about Gopher.
9. Explain in details about Smart Cities.
10. Explain in details about Industrial Internet of Things.

UNIT 4

1. Discuss AWS. Describe any five services of AWS.
2. What do you mean by the term cloud computing? What are its application areas?
3. Explain the concept of Software-as-a-service. Compare it with Platform-as-a-service
4. Differentiate between public and private cloud.
5. Briefly explain any two application areas of block chain.
6. Discuss GCP. Describe any five services of GCP.
7. Comparative study between AWS, GCP and Azure.
8. What is Crypto Currencies and also explain about its application in detail.
9. Define Block Chain in detail.
10. What are the various limitation of Block Chain.

UNIT 5

1. State features of quantum computing.
2. Define the term green computing.
3. Define Augmented Reality with its application.
4. Define Virtual Reality.
5. Compare concepts of augmented reality and virtual reality.
6. Discuss the need of brain-computer interface. Explain its features and limitations.
7. Describe various components of a grid with diagram.
8. Define Big data analytics.
9. Explain the limitations of Green Computing.
10. What are the advantages and disadvantages of Grid Computing.