

21. How does shared memory multiprocess or communication differ from message passing? 2 K1 CO4
22. Explain the working principle of digital still camera. 2 K2 CO5

PART - C (6 × 11 = 66 Marks)

Answer ALL Questions

23. a) Explain each step of the embedded system design process with relevant real-time examples. 11 K2 CO1

OR

- b) Illustrate how instruction set architecture influences the performance of embedded processors. 11 K2 CO1

24. a) Show how compilation techniques (assembly, linking, loading) influence program execution time. 11 K2 CO2

OR

- b) Explain the significance of compilation techniques in program-level optimization. 11 K2 CO2

25. a) Summarize the architecture and applications of Windows CE. 11 K2 CO3

OR

- b) Illustrate the concept of preemptive real-time OS with suitable scheduling examples. 11 K2 CO3

26. a) Demonstrate the different system design flows in embedded systems. 11 K2 CO4

OR

- b) Explain the importance of architecture design in embedded systems. 11 K2 CO4

27. a) Apply the case study of a video accelerator in the context of system design, focusing on how it improves video processing performance. 11 K3 CO5

OR

- b) Identify the data compression algorithms in embedded multimedia. 11 K3 CO5

28. a) Apply the concept of requirement analysis in system design with a real-time example. 11 K3 CO4

OR

- b) Identify importance of architecture design in embedded systems. 11 K3 CO4