Question Bank PT1

Term: Jan2022-June2022

Program: Computer Engineering Semester: II

Course: PC Architecture Code: PCA190802

Unit1

- 1) What are the major functions of CPU? (3)
- 2) Draw the block diagram of computer system indicating control flow and data flow (6)
- 3) Distinguish between primary memory and secondary memory (3)
- 4) Draw and Explain parts of motherboard with functionality (6)
- 5) Explain different types of motherboard (4)
- 6) What is cache memory? What are different types of cache memory? (4)
- 7) What is the need for cache memory ?How does Cache work? (4)
- 8) How to calculate hit and miss ratio of cache memory? Give example (3)
- 9) What is overclocking? What are pros and cons of overclocking? (4)
- 10) Draw the architecture of multicore processor? what are features, advantages and disadvantages of multicore processor? (6)
- 11) Explain different types of expansion slots in motherboard?(4)
- 12) write differences between PCI and PCI-Express slots (3)
- 13) Explain different cooling techniques for processor ?(3)
- 14) How CMOS and BIOS work together? (4)

Unit 3

- 1) Draw and explain northbridge /southbridge architecture of chipset?(6)
- 2) Draw and explain hub architecture of chipset (4)
- 3) What are advantages and disadvantages of hub architecture?
- 4) Enlist features of Intel 945g Chipset. (3)
- 5) Enlist features of Intel 915g Chipset. (3)
- 6) Compare Northbridge and Southbridge chipset (4)

Unit 4

- 1) Explain the parts of a hard disk with the help of a diagram (6)
- 2) Explain fragmentation and defragmentation of HDD?(4)
- 3) What are the reasons for fragmentation in HDD? (3)
- 4) Explain the significance of hard drive landing zone ? (4)
- 5) Explain FM recording technique of HDD with example (4)
- 5) Explain MFM recording technique of HDD with example (4)
- 6) Explain RLL recording technique of HDD with example (3)
- 7) Draw and explain the structure of MBR? (3)
- 8) List the functions of MBR? (3)
- 9) Explain the flow from BIOS to BOOT using MBR with the help of diagram? (4)
- 10) Distinguish b/w SSD and HDD (4)
- 11) Explain the parts of SSD with diagram? (4)