

Reg. No. :

Name :

First Semester B.Sc./B.C.A. Degree Examination, November 2019

Career Related First Degree Programme Under CBCSS

Group 2(b) – Computer Science/Computer Applications

Group 2(a) – Physics with Computer Applications

**Foundation / Vocational Course – CS 1121/CP 1121/PC 1171 – COMPUTER
FUNDAMENTALS AND ORGANIZATION**

(2018 Admission onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

(Very short answer type)

(One word to maximum of one sentences, Answer all questions)

1. What is an auxiliary storage?
2. What is DRAM?
3. Define ports and interfaces.
4. Write about any one CPU register.
5. What is POST?
6. What is DMA?

P.T.O.

7. Explain hit ratio.
8. Define CISC.
9. What is meant by Data transfer?
10. What is pipelining? (10 × 1 = 10 Marks)

SECTION – B
(Short answer)

(Not to exceed **one** paragraph. Answer **any eight** questions. Each question carries **two** marks)

11. What do you mean by instruction format?
12. What are the advantage of assembly language over high level language?
13. Explain any three Arithmetic Instructions.
14. What is meant by microinstructions?
15. Explain the role of DMA controller.
16. Explain Page Fault.
17. What do you mean by Pipelining of Operations?
18. Explain memory Interleaving.
19. What are the advantage of Multiprocessor System?
20. Define a cache memory.
21. What is an Interrupt?
22. What do you meant by Parallel Processing? (8 × 2 = 16 Marks)

SECTION – C

(Short Essay)

(Not to exceed 120 words. Answer **any six** questions. Each question carries **four** marks)

23. Explain about motherboard.
24. How an instruction is executed?
25. Explain the concept of Main Memory. What are the different types?
26. Explain Direct Memory Access.
27. Briefly discuss the different mapping techniques used in Cache memory system.
28. Explain different types of Input and Output Devices.
29. Explain Vector Processing.
30. What does 'Device Polling' means?
31. Explain about general purpose Multiprocessor. **(6 × 4 = 24 Marks)**

SECTION – D

(Long Essay)

(Answer any **two** questions. Each questions carries **fifteen** marks)

32. Explain in detail about secondary storage devices.
33. Explain the following
 - (a) SRAM
 - (b) ROM
 - (c) Asynchronous Data Transfer
34. Explain DMA, DMA Controller and DMA transfer modes.
35. Explain in detail about Instruction Format and Instruction cycles.

(2 × 15 = 30 Marks)