

B.C.A(Hons) Sem-V Examination , 2020

Subject-Computer Application

Paper-BCA-501(System Software)

Full marks: 80

Time: 3 hours

1. Answer any six questions.

6x5=30

- (a) What are maskable and non maskable interrupts? Give examples.
- b) What is the role of symbol table in compilation?
- c) Differentiate between compiler and interpreter.
- d) What are the basic functions of loader?
- e) What is macro processor? Write the advantages and disadvantages of macro processor.
- f) Discuss different types of system software.
- g) Write a short note on relocating loader.
- h) What is addressing mode? Write down different addressing modes of 8086 microprocessor.

2. Answer any five questions.

10x5=50

- (a) Explain the architectural diagram of 8086 microprocessor.
- (b) Explain different phases of a compiler with a suitable diagram
- (c) Design a simple interpreter.
- (d) Write down the features of a machine dependent loader.
- (e) What is Linker? Briefly explain the relocation and linking concepts.
- (f) Explain different operations performed in document editing process. How do translators interact with debugger?
- (g) Draw the block diagram of two-pass assembler and discuss the steps involved in it, indicating where the important data structures are built and used.