2. List the various phases of a language processor. Explain the role of each phase in it.

3. Define relocation factor. How to perform relocation ? Give algorithm for relocation.

4. Answer the following : (5 marks each)
(a) What do you understand by booting of a machine ?
(b) What is a Turning Machine ? Explain.
(c) What is a Lexical Analyzer ? Define.

5. Answer the following questions : (5 marks each)
(a) What is the difference between procedure and program ?
(b) What do you mean by system programming ?
(c) Define "Execution time" and "Compile time".
(d) What do you mean by dynamic linking and dynamic loading ?

Section - B
(Short-Answer-Type Questions)

Note - Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only.
$(5 \times 7 = 35)$

1. Explain the different types of language processors.

2. Explain the three basic features of an assembly level programming.

3. Explain hierarchy of grammars with suitable examples.

4. Explain the difference between one-pass and two-pass assembler.

5. What is a compiler ? What are the different phases of a computer ?

6. What is triples and quadruples code optimization ?

7. What are the different kinds of assembly language statement ? Give examples of each statement.

8. What do you mean by parsing ? Define parse tree. Note down the role of parser in compiler design.

 Roll No.....

BCA - 20

System Programming

Bachelor of Computer Application

(BCA - 11/16/17)

Sixth Semester, Examination - 2019

Time : 3 Hours **Max. Marks : 80**

Note - This Paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the Questions contained in these sections according to the detailed instructions given therein.

Section - A

(Long-Answer-Type Questions)

Note - Section 'A' contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any Three (03) questions only.

$(3 \times 15 = 45)$

1. Briefly explain a simple bootstrap loader, with an algorithm show the design of a bootsrap loader.