Reg. No.				1	

# VI Semester B.C.A. Degree Examination, September - 2021 COMPUTER SCIENCE

# System Programming (CBCS Scheme)

Time: 3 Hours

Maximum Marks: 100

## Instructions to Candidates:

Answer ALL sections.

### SECTION-A

L Answer any TEN questions. Each question carries Two marks.

 $(10 \times 2 = 20)$ 

- 1. Define system software.
- 2. Explain program status word.
- 3. Explain Using Pseudo Op.
- 4. Give the Format of MOT.
- 5. Explain the syntax to define a Macro.
- 6. Define Positional Argument.
- 7. Give the disadvantages of incorporating the macro processor into pass 1 of assembler.
- 8. Define Loader.
- 9. Explain EXTRN pseudo Ops.
- 10. Define Syntax Analysis.
- 11. What is Token? Give an example.
- 12. What is universal symbol table?

### SECTION-B

II. Answer any FIVE questions. Each question carries Five marks.

 $(5 \times 5 = 25)$ 

- 13. Explain Long way No Looping with example.
- 14. Explain the Pass 1 overview of Assembler.

Section 1			(2)	15622						
	15.	Des	scribe shell sort with example.							
	16.	Exp	plain Macro instruction arguments.							
	17.	Exp	xplain compile and Go Loader.							
	18.	Exp	Explain absolute loader with a neat diagram.							
	19.	Explain Databases used in Lexical analysis phase of a compiler.								
	20.	19的新疆,是1900年								
			SECTION-C							
Ш.	Ans	(3×15=45)								
	21.		iny THREE questions. Each question carries Fifteen marks.  Explain various types of Instruction formats used in IBM 360.	(7)						
	21.	b.	Explain General Machine structure of IBM 360.	(8)						
				(0)						
201	22.	a.	Mention the databases of Pass 1 and Pass 2 of an assembler.	(8)						
		b.	Perform Radix sort for the following numbers : -	(7)						
			19,13,5,27,1,26,31,16,2,9,11,21							
-	23.	3. a. Draw the Pass 1 flow chart of processing macro - definitions of macro process								
		b.	Explain Macro instructions defining macros with an example.	(7)						
	24.	a.	Explain the four types of cards used in Direct linking loader.	(8)						
di	Mar L	b.	Explain general loader scheme.	(7)						
	25.	a.	Explain the passes of a compiler.	(8)						
		b.	Explain Machine - Dependent optimization.	(7)						
			SECTION-D							
IV.	Ans	$(1 \times 10 = 10)$								
. 14	26.	a.	Draw the micro flow chart for ADD instruction.	(5)						
		b.	Write a note on major components of System Programming.	(5)						
	27.	Dra	nw neatly the structure of a Compiler.	(10)						