

# SPPU-TE-COMP-CONTENT – KSKA Git

Department of Computer Engineering

A.Y. 2024-2025 (Semester-I)

## UNIT TEST-I

Date: / / 2024

Time: 1 Hr

SET: A

Subject: SPOS

Maximum Marks: 30

Instructions to Candidates:

1. Attempt Questions Q.1 OR Q.2, Q.3 OR Q.4 ,Q.5 or Q.6
2. Neat diagrams must be drawn wherever necessary
3. Assume suitable data, if necessary

Question no.	Question	Marks	CO	PO
1.	a) Write algorithm of pass I of two pass assembler.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	b) Explain with example forward reference? How is it handled in single pass assembler	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	c) Write a short note on a) Loader b) Device Driver c) Assembler	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
OR				
2	a) What is System Software? Explain any 4 System Softwares. (With suitable diagrams.)	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	b) Show the content/entries of MOT,POT, ST and LT tables for following Assembly program: START 100 A DS 3 L1 MOVER AREG,B ADD AREG,C MOVEM AREG,D D EQU A+1 L2 PRINT D ORIGIN A-1 C DC '5' ORIGIN L2+1 STOP B DC '19' End L1	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	c) Explain in brief Assembler Directives with examples	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
3	a) Explain MACRO expansion with relevant example.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	b) Explain different phases of compiler with suitable diagram.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	c) What are different ways in which we can specify arguments to macros? Explain.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
OR				
4	a) Describe conditional Macro expansion.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	b) Explain the following. 1) Macro Definition 2) Macro Call 3) Nested Macro call	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4
	c) Compare Compiler and Interpreter.	5M	CO1,CO2,CO3	PO1,PO2,PO3,PO4