

SPPU-TE-COMP-CONTENT – KSKA Git

Total No. of Questions : 8]

SEAT No. :

PB-3779

[Total No. of Pages : 2

[6262]-37

T.E. (Computer Engineering)

SYSTEMS PROGRAMMING AND OPERATING SYSTEM

(2019 Pattern) (Semester - I) (310243)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q1 or Q2,Q3 or Q4, Q5 or Q6,Q7 or Q8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

Q1) a) Explain Differences between static link library and dynamic link library. **[8]**

b) What are the different types of Loaders ? Explain compile and Go loader in detail. **[9]**

OR

Q2) a) What is absolute loader? Explain design of absolute loader with suitable example and flowcharts. **[9]**

b) Explain Design of Direct linking loaders. **[8]**

Q3) a) Compare Compilers and Interpreters. **[8]**

b) What is YAAC? Explain working of YAAC with suitable diagram. **[9]**

OR

Q4) a) Define token, pattern, lexemes & lexical error. **[8]**

b) What is a compiler? Explain any two phases of compiler with suitable diagram. **[9]**

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- Q5) a)** Explain Preemptive and Non preemptive scheduling in detail. [9]
b) What is Operating System ? Explain various operating system services in detail. [9]

OR

- Q6) a)** What is Thread? Explain Thread Lifecycle in detail. [9]
b) Explain any two scheduling algorithm with suitable example. [9]

- Q7) a)** Explain Paging and segmentation with suitable example in detail. [9]
b) Explain following placement strategies: First Fit, Best Fit, Next Fit and Worst Fit. [9]

OR

- Q8) a)** Explain any two page replacement algorithms in detail. [9]
b) Define and Explain [9]

Virtual Memory

Translation Lookaside buffer

Thrashing

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