Total No. of Questions : 6]

SEAT No. :

P523

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APR - 18/TE/Insem. - 124

T.E. (Electronics and Telecommunication)

SYSTEM PROGRAMMING AND OPERATING SYSTEM

(2015 Pattern) (Semester - II)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
2) *Figures to the right indicate full marks.*

Q1) a) Give the definition of language processing and explain the phases of language processor in detail. **[6]**

b) Explain the need of lexical analyser. Explain with example how it works. **[4]**

OR

Q2) a) Explain different data structures used to design pass 1 and pass 2 of two pass assembler. **[6]**

b) Explain advanced macro facilities for Alteration of flow control during expansion with one example. **[4]**

Q3) a) Explain phases of compiler. **[6]**

b) Give difference between compile and go and absolute loader. **[4]**

OR

Q4) a) What is program relocation? Explain in detail with one example. **[6]**

b) Explain two types of memory allocation techniques. **[4]**

P.T.O.

Q5) a) List various types of operating system with their basic functions. **[6]**

b) Consider the following processes arrival time and burst time are as shown. Calculate average waiting time and average turnaround time if Quantum time is 2. Use Round Robin algorithm. **[4]**

Process	Burst time	Arrival time
P1	05	01
P2	04	00
P3	07	02

OR

Q6) a) Consider the following process where arrival time and burst time are as shown below. Calculate average waiting time and average turnaround time if the processes are scheduled using First Come First serve bases. **[6]**

Process	Burst time	Arrival time
P1	05	00
P2	04	01
P3	06	04
P4	07	06

b) Compare process and thread on Four Points. **[4]**

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