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SEAT No. :

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Oct.-16/T.E./Insem.-24

T.E. (E & TC) (Semester - I)

**SYSTEM PROGRAMMING AND OPERATING SYSTEM
(2012 Pattern)**

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

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

- Q1)** a) Explain the terms terminals, non-terminals, starting symbol and production rule set with example. **[6]**
b) Explain linear and nonlinear data structures **[4]**

OR

- Q2)** a) Explain Compilers and Interpreters **[6]**
b) Explain program generation activity **[4]**
- Q3)** a) List code optimization techniques and explain any 2 in details **[6]**
b) Explain LTORG and Origin statement with example **[4]**

OR

- Q4)** a) Explain lexical expansion of macro with example **[6]**
b) Explain static and dynamic memory allocation **[4]**
- Q5)** a) Explain in details design of editor **[6]**
b) Explain dynamic loading and linking **[4]**

OR

- Q6)** a) Explain compile and go loading scheme **[6]**
b) What do you mean by translated origin, linked origin and load origin **[4]**