

ES-221  
B.E. IV Semester  
Examination, June 2017  
Choice Based Credit System (CBCS)  
System Engineering  
(Common for all Branches)

Time : Three Hours] [Maximum Marks : 60

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

iii) Assume suitable data wherever necessary.

1. a) Discuss origin of system Engineering.  
b) Explain system engineering fields.
2. a) Discuss structure of complex systems.  
b) Explain system environment, interfaces.
- 3 a) Discuss complexity of modern systems.  
b) Explain concept development and exploration.
4. a) Discuss system operational requirements.  
b) Explain Implementation of concept exploration.
5. a) Discuss reducing program risk.  
b) Explain functional analysis and design.
6. Explain prototype development as a risk mitigation technique.
7. a) Explain test planning and preparation.  
b) Explain operational test and evaluation.
8. Write short notes on any two :
  - a) Production operations
  - b) System engineering approaches
  - c) Integrating testing

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