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
