**BIL – 542**

**Final Exam**

Questions:

1. Secure Network architecture designs: (25p)
   1. Write types of Firewalls depending on protocol level it controls (5p)
   2. Give a graphical presentation of Single-Box network architecture (10p)
   3. Give a graphical presentation of Screened Host network architecture (10p)
2. OSI Model (25p)
   1. What are layers in OSI model? Give short description of each of them (10p)
   2. Write at least 2 security protocols used at Application and Transport layers. How do they work? (15p)
3. Access control models (25p)
   1. What are 4 main categories of Access Control models? Give a short description of each of them (10p)
   2. How Access Control models can be implemented? Describe graphically each type (10p)
   3. Write properties of Mandatory Access Control model (5p)
4. If TCP/IP is used in aircraft design, what security concerns should be? How do we counteract treats in such design? (25)