- 1- The maximum range  $R_{max}$  in FMCW radar system increases when:
  - A) The sweep slope S increases
  - B) The maximum intermediate frequency  $f_{\mathit{IF\_max}}$  decreases
  - C) The radar sweep slope *S* decreases
  - D) The pulse repetition frequency increases.
- 2- To improve range resolution  $\Delta R$  in FMCW radar, the system should:
  - A) Increase the chirp duration  $T_{c}$
  - B) Increase the transmit signal bandwidth  ${\it B}$
  - C) Decrease the sweep slope S
  - D) Increase the operating frequency  $f_c$