

Q.1 -

a) Diagram - 02 marks

Explanation - 03

b) Each channel - Forward, reverse, control - 01 mark  
Strategy - Fixed, Dynamic - 01 mark

Q.2 -

a) Diagram - 02 marks

Explanation - 03

b) Each explanation - 01 mark

Q.3 -

a) 
$$P_R = \frac{P_T G_T G_R \lambda^2}{4\pi^2 d^2}$$
 - 05 marks

b) Multipath propagation, speed of mobile, speed of surrounding objects, transmission bandwidth of signal. - 05 marks

Q.4 -

a) Explanation - 05 marks

b) Diagram - 02 marks

Explanation - 03 marks

Q.5 -

a) Each - 2 1/2 marks

b) Diagram - 02 marks

Explanation - 03 marks

Q.6 -

a) Diagram - 02 marks

Explanation - 03 marks

b) Block diagram - 02 marks

Explanation - 03 marks