## **North South University**

## **Mat361**

## Quiz 1

## Total Marks-10 (Time -20 min + 10 min)

- 1) If you roll one dice, what is the probability of getting an even number or a odd number? Are the events mutually exclusive? Explain why? [3]
- 2) A card is drawn at random from a pack of cards. Calculate: P(club | black picture card) [3]
- 3) The probability density function is  $f(x) = 2(1-x^2)$  -4 < x < 1Is it a valid probability density function. Explain . [4]