



United International University
School of Science and Engineering

CT-01 Trimester: Summer-2020 Section: B

Course Title: Probability and Statistics

Course Code: Stat 205 Marks: 20 Time: 30 Mins

(Answer all the questions)

1. If from an ordinary pack of cards a single card is drawn. What is the probability that it is either a club or a ace? [5]
2. At a country fair carnival game there are **25** balloons on a board, of which **10** balloons are yellow, **8** are red, and **7** are green. A player throws darts at the balloons to win a prize and randomly hits one of them. If the first balloon hit is green, what is the probability of (i) next balloon is red, (ii) next balloon is not red. [6]
3. Four inspectors look at a critical component of a product. Their probabilities of detecting an error are different, namely, **0.98, 0.95, 0.92, 0.89** respectively. If we in sections are independent, then find the probability of (i) no one detecting the error, (ii) at least one detecting the error, (iii) only one inspector detecting the error. [6]
4. What is the probability of at least one "T" in *three* tosses of a coin? [3]