



COMSATS University Islamabad, Attock Campus
Artificial Intelligence Assignment No.4

Due Date: 22/12/2022

Instructions:

1. Submit handwritten assignment.
2. **Do not copy–paste from the book and other assignments (zero marks).**

Q. #1 Consider the following:

$$P \vee Q \rightarrow Q \vee R$$

Prove that it is a tautology/not a tautology using the theorem proving (CNF/DNF).

Do mention the reason why it is or it is not.

Q-2. Convert into First Order Logic.

- a. All students are outstanding
- b. The income of any programmer is greater than the income of any hawker
- c. Every student has a book