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|  | **BAHRIA UNIVERSITY,**  **(Karachi Campus)**  *Department of Software Engineering*  **Assignment # 01 – Spring 2022** |

COURSE TITLE: **Discrete Structures** COURSE CODE: **CSC - 115**

CLASS: **BSE – 2A & 2B** SHIFT: **Morning**

INSTRUCTOR: **Engr. Ammarah Khalid** DATE: **22nd MARCH 2022**

MAX. MARKS: **4 Marks** Due Date: **1st Apr 2022**

**STUDENT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ REG # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ASSIGNMENT # 01 (CLO – 1)**

**Task # 01:** Solve the following questions from the book “Discrete Mathematics” that is uploaded on LMS:

**Question # 01:** Solve the following questions from Exercise 1.1:   
1, 3, 9, 11, 13, 15, 17, 19, 25, 27, 29, 31, 33 and 37.

**Question # 02:** Solve the following questions from Exercise 1.2:   
1,7,9 & 11

**Question # 03:** Show that the following propositions are logically equivalent to each other (using laws)

* + p ↔ q ≡ (p ∧ q) ∨ (¬p ∧¬q)
  + (p → q) ∧ (p → r) ≡ p → (q ∧ r)