



SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under Section 3 of the UGC Act, 1956)

Re-accredited by NAAC with 'A++' Awarded Category – I by UGC

Founder: Prof. Dr. S. B. Mujumdar, M.Sc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

Tutorial-9_CO1

Subject Name: Discrete Mathematics

B.Tech._AIML_SEM-IV_2023-27 (AY-2024-25)

.....

Q.1: Check the set $G = \{1, 2, 3, 4, 5\}$ for group under multiplication modulo 6?

Q.2: Prove that the set of integers Z with binary operation $*$ defined by $a * b = a + b + 1, \forall a, b \in Z$, is an abelian group

Q.3: Prove that the set $R = \{0, 1, 2, 3\}$ is a ring with respect to compositions $+_4$ and \times_4 .

Q.4: Prove that the set $F = \{0, 1, 2, 3\}$ is a field under the modulo 4.
