



Mandsaur University

FOE - Bachelor of Technology (Computer Science And Engineering)

MAT220 TR1

Discrete Mathematics (Pattern - 2024)

Sem-III

S. No.	Question	Marks
Assignment-2		
Q.1	Prove $\neg(A \vee B)$ and $[(\neg A) \wedge (\neg B)]$ are logically equivalent.	4
Q.2	By using truth table, prove $p \oplus q \equiv \neg(p \leftrightarrow q)$.	4
Q.3	Give the definition of Conditional Statement and By-Conditional Statement. Also Construct the Truth Table for $(P \rightarrow Q) \wedge (Q \rightarrow R)$.	4
Q.4	Determine the contrapositive of each statement: (a) If Erik is a poet, then he is poor. (b) Only if Marc studies will he pass the test.	4
Q.5	By using truth table, prove $p \vee (q \wedge r) \equiv (p \vee q) \wedge (p \vee r)$.	4