

Model Question Paper
B.Tech. IV Semester (CS, IT)
Sub.: DMS

Time: 1 hr.

Max. Marks: 20

Q.1 state the Converse, Inverse and Contra positive of the statement “If you are guilty, then you are punished”.

Q.2 Show that the Propositional formula $(p \wedge q) \wedge (r \wedge s) \rightarrow p$ is Tautology.

Q.3 Check the validity of the argument

$$\begin{array}{l} p \rightarrow q \\ p \vee r \\ r \rightarrow \neg s \\ s \\ \hline \therefore q \end{array}$$

Q.4 Prove the implication “If n is an integer not divisible by 3, then $n^2 \equiv 1 \pmod{3}$ ”.

Q.5 Define Vacuous and Direct proof with Example.