# NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR

DEPARTMENT OF MECHANICAL ENGINEERING 6<sup>th</sup> Semester (3<sup>rd</sup>Year), Mechanical Engineering Subject: MACHINE DESIGN (MEC 602)

### **MECHANICAL ENGINEERING**

**MEC602-MACHINE DESIGN** 

# DEPARTMENT OF MECHANICAL ENGINEERING

B.Tech (6<sup>th</sup> Semester Examination)

Course: Machine Design-II

Maximum Marks: 10

# **Assignment 1**

**Problem A:** For a band brake to exert braking toque of 80 Nm to slow down drum from 2rps.Radius of Drum = 0.152m,  $\theta = 225^{\circ}$ , thickness of rim = .05 m.

Q1. Maximum tension produced =	1
Q2. For the data refer Problem A Maximum tension produced=	CO <sub>1</sub>
	CO1
Q3. For data refer Problem A Friction Torque(Tf)=	1
	CO2
Q4. For the data refer Problem A Area=	1
	CO1
Q5. For the data refer Problem A Friction Power(Pf)=	1
	CO2

<sup>\*</sup>Total= Score \* Weightage(2)