**ME6502 HEAT AND MASS TRANSFER DAILY TEST-3 (27-07-18) III MECH**

01) Air at 30C, at a pressure of 1 bar is flowing over a flat plate at a velocity of 3 m/s. if the plate maintained at 80C, calculate the heat transfer per unit width of the plate. Assuming the length of the plate along the flow of air is 2 m. **(15MARKS)**

02) A 6 m long copper rod (k = 300 W/mK) 6mm in diameter is exposed to an environment at 20°C. The base temperature of the rod is maintained at 160°C. The heat transfer co-efficient is 20 W/m2K. Calculate the heat given by the rod and efficiency and effectiveness of the rod. **(15MARKS)**

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