M.Tech. 2nd Semester Mechanical Engg. (Machine Design) Examination, May–2017

DESIGN OF MECHANISM

Paper–M-804-A

Time allowed : 3 hours]   *[Maximum marks : 100*

Note : *Attempt only five questions.*

1. Explain methods to determine DOF for various mechanism.   20

2. Explain synthesis of mechanism along with methods of evaluation.   20

3. Explain matrix methods of design.   20

4. Explain type synthesis and number synthesis in detail.   20

5. Explain design and analysis using ADAMS.   20

6. Classify manipulators with examples in detail.   20

7. Derive Freudenstein equation.   20

8. Design a slider crank mechanism so that displacement of slider is proportional to square of crank rotation in interval $45° \leq \phi_2 \leq 135°$. Use the three point Chebyshev Spacing.   20