

Menoufia University
Faculty of Engineering
Shebin El- Kom
Dept. Production Engineering
Final Exam.
Academic Year: 2015 – 2016

Examiners :
Prof. Dr. Adel Abdelmaboud



Subject: NTM
Code: level 600
Date: Jun / 8 /2016
Time Allowed: 3 Hours
Total Marks :100 Marks

Prof. Dr. M. S. Hewidy

Question (1)

1. What is the necessity of NTM processes?
2. Sketch the effect of the following parameters on MRR and surface finish in USM process: amplitude, frequencies abrasive size of WP material hardness, concentration of abrasive.
3. Sketch a simple flow-chart to show how you can select the suitable NTM process.
4. With a neat sketches, explain briefly the working principle of the USM machine, applications and limitations of the processes

Question (2)

1. What is the function of servo system in EDM process? Discuss and sketch how it works
2. Why it is good to avoid sharp corners in building dies?
3. How has orbiting reduces costs concerning electrodes?