MINISTRY OF EDUCATION AND CULTURE
UNIVERSITAS NEGERI PADANG
MAJORING IN MECHANICAL ENGINEERING
Address: Jl. Prof. Dr. Hamka, Air Tawar UNP Campus, Padang 25131
Tel. (0751) 7055644, Fax (0751) 7055628, website:www.ft.unp.ac.id, e-mail: info@ft.unp.ac.id

MIDDLE SEMESTER EXAM

Courses : Kinematics and Dynamics
Code / SKS : MES1.61.4102
Nature of the Exam : Closed Book
Lecturer : Delima Yanti Sari, Ph.D
Time : 90 minutes
Maximum Grade : 35 points

No.	Question	Grade
1	Explain what are the scope of kinematics and dynamics	5
2	Explain the difference between linear acceleration and angular acceleration	5
3	Calculate the relative velocity of two different points	5
4	Calculate the relative speed of the crank-launch mechanism	5
5	Calculate the speed of the Watt road block mechanism	5
6	Calculate the relative acceleration of a point on a connecting rod	5
7	Calculate the relative acceleration of the crank-launch mechanism	5
	Total Score	35

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FINAL SEMESTER EXAM

Courses : Kinematics and Dynamics
Code / SKS : MES1.61.4102
Nature of the Exam : Closed Book
Lecturer : Delima Yanti Sari, Ph.D
Time : 90 minutes
Maximum Grade : 35 points

No.	Question	Grade
1	Calculate the relative acceleration of the shrink mechanism	5
2	Calculate the relative acceleration of the modified shrink mechanism	5
3	Calculate the relative accelerations of the equivalent mechanism	5
4	Calculate the equilibrium for the five forces	5
5	Calculate the force on the collision of two objects	5
6	Explain what is meant by the moment of inertia	5
7	Calculate the inertia force on a rotating object with respect to one point	5
	Total Score	35

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ASSIGNMENT PROBLEMS

Courses : Kinematics and Dynamics
Code / SKS : MES1.61.4102
Lecturer : Delima Yanti Sari, Ph.D
Maximum Grade : 20 points

No.	Question	Grade
1	Calculate the relative acceleration of the shrink mechanism	2
2	Explain the difference between linear acceleration and angular acceleration	2
3	Calculate the relative velocity of two different points	2
4	Calculate the relative speed of the crank-launch mechanism	2
5	Calculate the speed of the Watt road block mechanism	2
6	Calculate the relative acceleration of the crank-launch mechanism	2
7	Calculate the relative acceleration of the modified shrink mechanism	2
8	Calculate the relative accelerations of the equivalent mechanism	2
9	Calculate the equilibrium for the five forces	2
10	Calculate the force on the collision of two objects	2
	Total Score	20