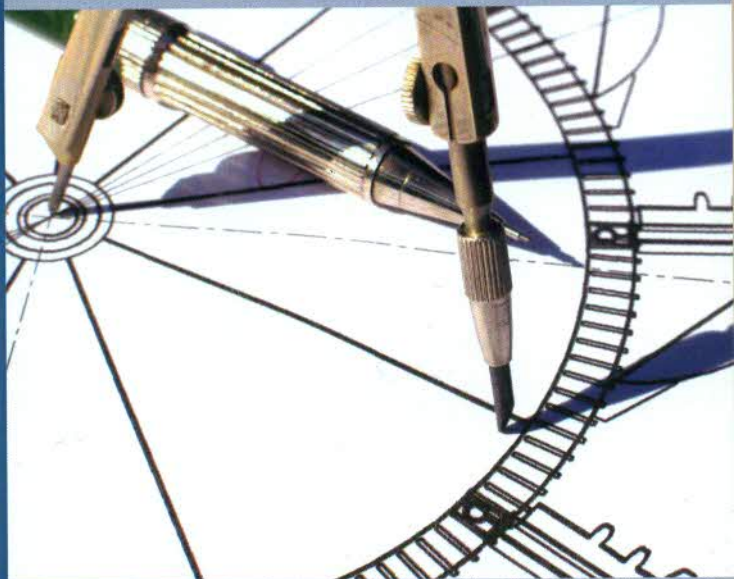


# TEST QUESTIONS ON THEORETICAL MECHANICS

Collection of tests



КАЗАК  
УНИВЕРСИТЕТИ  
БАСПАҒЫ

AL-FARABI KAZAKH NATIONAL UNIVERSITY

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TEST QUESTIONS ON  
THEORETICAL MECHANICS

*Collection of tests*

Almaty  
«Qazaq University»  
2019

UDC 531 (075.8)

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Educational publication contains the test tasks for the discipline "Theoretical Mechanics" and covers all the topics of the Typical Curriculum of 2016 on this discipline.

Tests are recommended for teaching students on the specialty "Mechanics", as well as for the students of all related specialties of science and technology, where the mechanics is studied: "Space engineering and technologies", "Mathematical and computer modeling", "Mathematics", etc. They will be very useful for the students to self-test the gained knowledge, for teachers – in order to verify students' assimilation of knowledge. In connection with the introduction of entrance examinations to the magistracy in the form of tests, this collection will be very convenient for the students to prepare for the test in their specialty.

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## INTRODUCTION

Theoretical mechanics is the science about the general laws of mechanical interactions between material bodies, as well as general laws of motion of bodies relative to each other. Therefore, theoretical mechanics is one of the basic core disciplines for all specialties in area of natural science and area of engineering and technology.

The suggested collection of test tasks covers all the topics of the classical course of theoretical mechanics: kinematics, statics, dynamics of a mass point, dynamics of a mechanical system, dynamics of a rigid bodies, and corresponds to the Typical Curriculum of 2016 on this discipline.

The collection consists of the 300 test questions with five, six and seven answers according to the modern requirements to the test tasks. The number of correct answers in the test tasks: one correct answer is in 100 questions, two correct ones – in 100 questions, three correct ones – in 100 questions. The table of correct answers is adduced at the end of the book.

Tests are recommended for teaching students on the specialty "Mechanics", as well as for the students of all related specialties of science and technology, where the mechanics is studied: "Space engineering and technologies", "Mathematical and computer modeling", "Mathematics", etc. They will be very useful for the students to self-test the gained knowledge, for teachers – in order to verify students' assimilation of knowledge. In connection with the introduction of entrance examinations to the magistracy in the form of tests, this collection will be very convenient for the students to prepare for the test in their spe-cialty.