

1	Explain introduction to the course "Programming and computer calculations in physics"	№1
2	Explain introduction to the system of Mathematica	№1
3	Analyze model of calculating	№1
4	Give definition and describe numbers and their representation and operations over them	№1
5	Explain arithmetic: the greatest common divisor and least common multiple	№1
6	Explain arithmetic: the decomposition of integers into prime factors	№1
7	Give definition of arithmetic: primenumbers	№1
8	Describe division with remainder, deductions, comparisons	№1
9	Explain the Chinese remainder theorem	№1
10	Analyze numerical functions	№1
11	Describe multimedia: geometry, graphics, cinema, sound	№1
12	Give the classification of factorization Factor Integer ECM	№1
13	Explain plotting	№1
14	Explain linear programming	№1
15	Give definition and describe nuclear forces	№1
16	Give definition of Nuclear Models	№2
17	Explain factorization of very large numbers	№2
18	Characterize nuclear forces and nuclear models	№2
19	Give the classification of Basic Concepts of Nuclear Physics	№2
20	Explain Toward a Unified Model Description of Nuclei	№2
21	Explain introduction to Nuclear Interactions and Reactions	№2
22	Describe Coulomb Excitation	№2
23	Explain Compound Nucleus Reactions	№2
24	Analyze Compound Nucleus Reactions and Other Reactions	№2
25	Describe Some Selected Applications of Nuclear Physics	№2
26	Characterize Radioactive Decay Laws	№2
27	Give definition of Alpha, Proton, Heavy Cluster	№2
28	Describe Spontaneous Fission Decays	№2
29	Explain Gamma Decay	№2
30	Give definition of Internal Conversion	№2
31	Explain Pair Production	№3

32	Describe Beta Decay	№3
33	Give definition of Radioactive Decay	№3
34	Explain Introduction to Nuclear Interactions and Reactions	№3
35	Characterize Reaction Kinematics	№3
36	Describe Fission and Fusion: Atomic Energy Utilization	№3
37	Explain Some Selected Applications of Nuclear Physics	№3
38	Analyze Nuclear Interactions and Reactions	№3
39	Give the classification of Magnetic Dipole Hyperfine Interaction	№3
40	Describe Electric Quadrupole Hyperfine Interaction	№3
41	Give definition of Particle Families and Interactions	№3
42	Explain Conservation Rules	№3
43	Give definition and describe High-Energy Physics	№3
44	Describe Some Selected Applications of Nuclear Physics	№3
45	Explain Introduction to Nuclear Interactions and Reactions	№3