



## FINAL EXAMINATION VEHICLE STRUCTURES AND MAINTENANCE

1. Legal background, structural properties of engines.
2. Vehicle Manufacturer companies, their characteristics, drive systems.
3. Engine starter motors, principles of starting systems, types of starters, regenerative drives, vehicle electrical systems, starter design (sliding (push) wheel, Bendix slip ring, start-stop system).
4. Special vehicles. Individual aggregates.
5. Suction side, atomization, mixture preparation.
6. Exhaust side, excess air control, reduction of harmful emissions.
7. Engine failures, engine characteristics, indicator diagrams.
8. Automotive clutches, differential principle and practice.
9. Steering gears, braking systems.
10. Tires: types and properties.
11. The active occupant protection systems.
12. The passive occupant protection systems.
13. Vehicle dynamics, safe driving.
14. Undercarriage.