



**ACE**<sup>®</sup>  
Engineering Academy  
Leading Institute for ESE/GATE/PSUs



# APPSC

## ASSISTANT MOTOR VEHICLE INSPECTOR

### *Online* Test Series

## Mechanical/Automobile Engineering - Schedule

No.of Tests : 27 + 10 <i>Free</i> Practice Tests			
	Paper-I	Paper-II	Practice Tests
Subject Wise Tests	11	10	10
Full Length Mock Tests	2	4	
<b>Total Tests : 37</b>			

**Note:**

- ❖ The syllabus is based on the previous APPSC-AMVI notification. ACE Engineering Academy does not take responsibility for any changes or deviations in the final APPSC-AMVI examination syllabus.
- ❖ As per the previous APPSC-AMVI notification, each question carries 1 mark and each wrong answer will be penalized with 1/3rd of the marks prescribed for the question.
- ❖ The test dates may change depending on the APPSC-AMVI examination schedule.
- ❖ Tests will be activated at 6:00 PM on the scheduled day.
- ❖ All tests will remain active until the APPSC-AMVI examination.
- ❖ The test series is available only in English medium.

# Paper-I

## Subject wise Tests

(No.of Questions: 30, Time duration: 30 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	<b>General Studies and Mental Ability-1:</b> General Science and its applications to the day to day life Contemporary developments in Science & Technology and Information Technology.	15-05-2026
Test-02	<b>General Studies and Mental Ability-2:</b> History of India – emphasis will be on broad general understanding of the subject in its social, economic, cultural and political aspects with a focus on Indian National Movement.	19-05-2026
Test-03	<b>General Studies and Mental Ability-3:</b> Geography of India	23-05-2026
Test-04	<b>General Studies and Mental Ability-4:</b> Indian Polity and Governance: constitutional issues, public policy, reforms and e-Governance initiatives.	27-05-2026
Test-05	<b>General Studies and Mental Ability-5:</b> Indian Economy and Planning	31-05-2026
Test-06	<b>General Studies and Mental Ability-6:</b> Sustainable Development and Environmental Protection	04-06-2026
Test-07	<b>General Studies and Mental Ability-7:</b> Disaster Management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.	08-06-2026
Test-08	<b>General Studies and Mental Ability-8:</b> Andhra Pradesh- Economy, Geography and History	12-06-2026
Test-09	<b>General Studies and Mental Ability-9:</b> Major Current Events and Issues pertaining to International, National and State of Andhra Pradesh.	16-06-2026
Test-10	<b>General Studies and Mental Ability-10:</b> Logical reasoning, analytical ability and logical interpretation.	20-06-2026
Test-11	<b>General Studies and Mental Ability-11:</b> Data Analysis: Tabulation of data Visual representation of data Basic data analysis (Summary Statistics such as mean, median, mode and variance) and Interpretation.	24-06-2026

## Full Length Mock Tests

(No.of Questions: 150, Time duration: 150 Minutes and Marks: 150 M)

Test-12	Full Length Mock Test-1	Date will be updated soon
Test-13	Full Length Mock Test-2	

# Paper-II

## Subject wise Tests

(No. of Questions: 30, Time duration: 30 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-14	<b>Basic thermodynamics:</b> Basic thermodynamics- Systems-Closed/Open systems, Property, cycle. Thermodynamic equilibrium- Zeroth law, First law, Second Law of thermodynamics- Pure substance- Mollier Diagram	18-07-2026
Test-15	<b>Vapor Power cycles and Air standard cycles:</b> Vapor Power cycles-Rankine cycle-Air standard cycles-Otto, Diesel, Dual combustion cycle, derivation of expressions for mean effective pressure-diagram factor, efficiency, Stirling engine,	25-07-2026
Test-16	<b>Basics of Mechanical Engineering:</b> gears-nomenclature-simple, compound, epicyclic trains-calculations of torques. Shafts-solid, hollow shafts; shear stress and angular deflection due to torque applied; bending moments — combined moment and torque. Friction - inclined plane; screw and nut; screw jock; self locking. Balancing of single cylinder engines	01-08-2026
Test-17	<b>Fuels and Combustion:</b> Fuels - fire and flash point - calorific value - calorimeters- octane, cetane numbers and its importance — stoichiometric ratio. Single cylinder, multi cylinder engine - pre whirl chambers- combustion/ignition delay - knocking, detonation. Firing order; piston and piston rings; temperature profile of piston.	08-08-2026
Test-18	<b>Carburetion and Injection system and Lubrication and cooling systems:</b> Fuel system - Carburetion, carburetors, Gasoline/petrol injection systems - diesel fuel injection systems, types-common rail injection system, Fuel tank. Lubrication and cooling systems in automobile.	15-08-2026
Test-19	<b>Transmission and Brakes:</b> Transmission - gear box - clash type, synchromesh, automatic transmission systems. propeller-shaft — universal coupling — differential - halfshafts -floating, clutches -single, multi-plate -bearing pressure-pressure plate - axial load - fluid clutch. Brakes and brake mechanisms-mechanical, hydraulic and air brakes.	22-08-2026
Test-20	<b>Electrical system, Exhaust gas analysis and Air conditioning of automobiles:</b> Electrical system — delco system , circuit wiring, working of electrical equipment. Exhaust gas analysis — Pollutants -Sources - Formation - Effects Of Pollution On Environment — Human — Transient Operational Effects On Pollution — Regulated — Unregulated Emissions — Emission Standards. EMISSIONS IN SI ENGINE: Chemistry Of SI Engine Combustion — HC and CO Formation In SI Engines — NO Formation In SI Engines — Smoke Emissions From SI Engines — Effect Of Operating Variables On Emission Formation. EMISSIONS IN CI ENGINE: Basics Of Diesel Combustion — Smoke Emission And Its Types In Diesel Engines — NO <sub>x</sub> Emission And Its Types From Diesel Engines — Particulate Emission In Diesel Engines. Odor, Sulfur And Aldehyde Emissions From Diesel Engines — Effect Of Operating Variables On Emission Formation. Air conditioning of automobiles.	29-08-2026

Test No	Name of the Test	Date of Activation
Test-21	<b>Steering and traffic Rules:</b> Steering-condition for correctsteering — Ackermann steering. Automobile wheel alignment — camber. castor — Kingpin inclination — toe-in, toe-out, Maintenance oftyres - traffic Rules	05-09-2026
Test-22	<b>Material Science:</b> Materials- structure of the metals -imperfections-ferrous and non ferrous materials- heat treatment of steels.	12-09-2026
Test-23	<b>Instrumentation:</b> Instrumentation transducers-Motion, level, force and temperature transducers- Closed loop control and open loop control systems.	19-09-2026

### Full Length Mock Tests

*(No.of Questions: 150, Time duration: 150 Minutes and Marks: 150 M)*

Test-24	Full Length Mock Test-1	26-09-2026
Test-25	Full Length Mock Test-2	03-10-2026
Test-26	Full Length Mock Test-3	10-10-2026
Test-27	Full Length Mock Test-4	17-10-2026

# Paper-II-Free Practice Tests

## Subject wise Tests

(No. of Questions: 30, Time duration: 30 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	<b>Basic thermodynamics:</b> Basic thermodynamics- Systems-Closed/Open systems, Property, cycle. Thermodynamic equilibrium- Zeroth law, First law, Second Law of thermodynamics- Pure substance- Mollier Diagram	<b>05-05-2026</b>
Test-02	<b>Vapor Power cycles and Air standard cycles:</b> Vapor Power cycles-Rankine cycle-Air standard cycles-Otto, Diesel, Dual combustion cycle, derivation of expressions for mean effective pressure-diagram factor, efficiency, Stirling engine,	
Test-03	<b>Basics of Mechanical Engineering:</b> gears-nomenclature-simple, compound, epicyclic trains-calculations of torques. Shafts-solid, hollow shafts; shear stress and angular deflection due to torque applied; bending moments — combined moment and torque. Friction - inclined plane; screw and nut; screw jock; self locking. Balancing of single cylinder engines	
Test-04	<b>Fuels and Combustion:</b> Fuels - fire and flash point - calorific value - calorimeters- octane, cetane numbers and its importance — stoichiometric ratio. Single cylinder, multi cylinder engine - pre whirl chambers- combustion/ignition delay - knocking, detonation. Firing order; piston and piston rings; temperature profile of piston.	
Test-05	<b>Carburetion and Injection system and Lubrication and cooling systems:</b> Fuel system - Carburetion, carburetors, Gasoline/petrol injection systems - diesel fuel injection systems, types-common rail injection system, Fuel tank. Lubrication and cooling systems in automobile.	
Test-06	<b>Transmission and Brakes:</b> Transmission - gear box - clash type, synchromesh, automatic transmission systems. propeller-shaft — universal coupling — differential - halfshafts -floating, clutches -single, multi-plate -bearing pressure-pressure plate - axial load - fluid clutch. Brakes and brake mechanisms-mechanical, hydraulic and air brakes.	
Test-07	<b>Electrical system, Exhaust gas analysis and Air conditioning of automobiles:</b> Electrical system — delco system , circuit wiring, working of electrical equipment. Exhaust gas analysis — Pollutants -Sources - Formation - Effects Of Pollution On Environment — Human — Transient Operational Effects On Pollution — Regulated — Unregulated Emissions — Emission Standards. EMISSIONS IN SI ENGINE: Chemistry Of SI Engine Combustion — HC and CO Formation In SI Engines — NO Formation In SI Engines — Smoke Emissions From SI Engines — Effect Of Operating Variables On Emission Formation. EMISSIONS IN CI ENGINE: Basics Of Diesel Combustion — Smoke Emission And Its Types In Diesel Engines — NOx Emission And Its Types From Diesel Engines — Particulate Emission In Diesel Engines. Odor, Sulfur And Aldehyde Emissions From Diesel Engines — Effect Of Operating Variables On Emission Formation. Air conditioning of automobiles.	

Test No	Name of the Test	Date of Activation
Test-08	<b>Steering and traffic Rules:</b> Steering-condition for correctsteering — Ackermann steering. Automobile wheel alignment — camber. castor — Kingpin inclination — toe-in, toe-out, Maintenance oftyres - traffic Rules	<b>05-05-2026</b>
Test-09	<b>Material Science:</b> Materials- structure of the metals -imperfections-ferrous and non ferrous materials-heat treatment of steels.	
Test-10	<b>Instrumentation:</b> Instrumentation transducers-Motion, level, force and temperature transducers- Closed loop control and open loop control systems.	