

## **BOARD OF SCHOOL EDUCATION HARYANA**

## Syllabus and Chapter wise division of Marks (2025-26)

Class- 9<sup>th</sup>

#### Subject: Automotive

**Code: AUT 926** 

#### **General Instructions:**

1. There will be an Annual Examination based on the entire syllabus.

2. The Annual Examination will be of 60/2=30 marks. Practical Examination will be of 50 marks and 20 marks weightage shall be for Internal Assessment.

- 3. For External Assessment (Practical) Examination:
  - (i) External Assessment- Hand on Skill of 25 (Written 10, Practical 15).
  - (ii) External Assessment- Portfolio of 10.
  - (iii) External Assessment- Viva of 15.

4. For Internal Assessment:

There will be Periodic Assessment that would include:

- For 6 marks- Three SAT exams will be conducted and will have i) a weightage of 06 marks towards the final Internal Assessment.
- For 2 marks- One half yearly exam will be conducted and will ii) have a weightage of 02 marks towards the final Internal Assessment.
- iii) For 2 marks- Subject teacher will assess and give maximum 02 marks for CRP (Class room participation).
- For 5 marks- A project work to be done by students and will iv) have a weightage of 05 marks towards the final Internal Assessment.
- For 5 marks- Attendance of student will be awarded 05 marks V) as:

75% to 80%	- 01 Marks
Above 80% to 85%	- 02 Marks
Above 85% to 90%	- 03 Marks
Above 90% to 95%	- 04 Marks
Above 95% to -	- 05 Marks



# **Course Structure (2025-26)**

Class-9<sup>th</sup>

Subject: Automotive

Code: AUT 926

Unit. No.				
1	History and Evolution of Automobile			
2	Various Type of Automobile	08		
3	System and Component of Automobile	12		
4	Road Safety	09		
5	Automobile and our Environment	04		
6	Vehicle Maintenance and Service	08		
7	Innovation and Development in Automobile	04		
Unit. No.	Employability Skill Units	Unit Marks		
1.	Communication Skills	2		
2.	Self-Management Skills	2		
3.	Information and Communication Technology Skills	2		
		2		
4.	Entrepreneurship Skills	2		
4. 5.	Green Skills	2		
	Green Skills	2		
	Green Skills Total	2 60/2=30		



## **Unit 1: History and Evolution of Automobile**

Innovation of Wheel, Wheel and its Structure Wheel cart, type of cart Innovation of Automobile Innovation of Automobile (post World War ii), Indian Automobile Scenario.

### **Unit 2: Various Type of Automobile**

Two wheeler and three wheeler Passenger and commercial vehicle Agriculture Vehicle, Combine Harvester Construction Equipment Vehicle Like – Bulldozer, Road Roller, Dumper, Excavator Etc. Special Vehicle **Unit 3: System and Component of Automobile** 

Chassis and Auto Body ,Automobile Body or Super structure Engine and its components SI and CI Engine, Component of IC Engine Lubrication System, Objective of Lubrication Cooling System ,Necessity of cooling Fuel supply system ,fuel supply component Transmission System ,Requirement of Clutch, main parts of clutch, function of gear box. Front and rear axle ,Propeller shaft .Steering and suspension system ,function of steering system, Requirement of good steering system, various component of suspension system Wheel tyre and Brake, Function of wheel ,function of tyre ,requirement of good breaking system, type of brake. Electrical or electronic and AC, Component of ACActive and Passive Safety

## **Unit 4: Road Safety**

Importance of Road safety, Safety devices Safe and responsible driving, Know your blind spot, fasten your seat belt. Road sign Driving rule and registration, Registration rule and process, Driving Licence, Air Pollution, Auto Emission and EU/BS Standards, Emission norms in India PUC Certification

#### **Unit5: Automobile and our Environment**

Importance of vehicle Maintenance and servicing ,Daily inspection, maintenance check-up

#### **Unit 6:Vehicle Maintenance and Service**

Tips to extend life of vehicle Introduction to vehicle service procedure, Filling job card

#### **Unit 7:Innovation and Development in Automobile**

Innovation and development ,Electric car, hybrid vehicle, fuel cell, New Development, G-CON

3



## Employability Skill –

- Communication skill,
- Self-management skill,
- Information and Communication Technology skill (ICT),
- Entrepreneurship Skill,
  - Green skills

## Practical's: -

- 1. Wheel cart
- 2. Two Wheelers
- 3. Three wheelers
- 4. Construction Vehicles
- 5. Chassis
- 6. Body
- 7. Engine and is components
- 8. Cooling system
- 9. Fuel Supply System
- 10. Transmission system
- **11. Front and Rear Axle**
- 12. Steering and suspension system
- 13. Wheel and tyre
- 14. Brake.
- **15. Safety Device**
- 16. Road sign.
- 17. Driving Registration.
- **18. Air Pollution.**
- 19. Job card.
- 20. New Innovation.



# Month wise Syllabus Teaching Plan (2025-26)

Class-	9 <sup>th</sup> Subject: Automotive	Co	de: AUT	926
Month	Subject- content	Teaching Periods	Revision Periods	Practical Work
April	Automobile – Introduction of Automobile About Automobile Industry Scope of Automobile Employability Skill	6	2	3
May	Automobile – Unit -1 Session-1- Innovation of Wheel ,Wheel and its Structure Session-2- Wheel cart ,type of cart Session-3-Innovation of Automobile Session-4- Innovation of Automobile (post World War ii), Indian Automobile Scenario. Employability Skill – Unit-01 Session 01- Introduction to communication Session 02-Verbal Communication Session 03- Non-Verbal Communication Session 04-Writing Skills Parts of speech	16	2	3
June	Home Work – Make all Practical Revision ES Session		All Session	
July	Automobile – Unit-2 Session-1- Two wheeler and three wheeler Session-2- Passenger and commercial vehicle Session -3- Agriculture Vehicle ,Combine Harvester Session -4- Construction Equipment Vehicle Like – Bulldozer ,Road Roller, Dumper, Excavator Etc. S-5 – Special Vehicle Employability Skill – Unit-01 Session 05- Writing Skills Sentences Session 06-Pronunciation Basics Session 07-Greeting and Introduction Session 08-Talking about Self Session 09-Asking Question-II Session 10- Asking Question-II	12	06	07



August	Automobile – Unit-3	16	04	04
August		10	04	04
	Session :1- Chassis and Auto Body			
	,Automobile Body or Superstructure			
	Session :2- Engine and its components SI			
	and CI Engine, Component of IC Engine			
	Session :3- Lubrication System ,Objective			
	of Lubrication			
	Session :4- Cooling System, Necessity of			
	cooling			
	Employability Skill – Unit 02			
	Session 01-Introduction to Self-			
	Management	0.		
	Session 02- Strength and Weakness	T/Q		
	Analysis Session 03- Self-Confidence	147		
/		1	. \	
/	Session 04-Positive Thinking		ON/	
/	Session 05-Personal Hygiene		2	
Contombor	Session 06- Grooming	14	06	02
September	Revision for Half-Yearly Exam Automobile – Unit -3	14	06	03
	Session : 5- Fuel supply system ,fuel supply component			
	Session :6 – Transmission System ,			
	Requirement of Clutch, main parts of	-		
	clutch, function of gear box.			
	Session :7- Front and rear axle ,Propeller			
	shaft .			
	Employability Skill Unit-03	7 1		
	Session 01- Introduction to ICT	1		
	Session 02-ICT Tools- Smartphones and	500		
	Tablets-I	10	/	
	Session -03- Smartphones and Tablets-II	/		
	Session 04-Parts of Computer Peripherals	/		
	Half-Yearly Exam			
				2



October	Automobile – Unit-3	12	02	06
	Session :8-Steering and suspension system,			
	function of steering system, Requirement			
	of good steering system, various			
	component of suspension system			
	Session :9 -Wheel tyre and Brake,			
	Function of wheel ,function of tyre ,			
	requirement of good breaking system, type			
	of brake.			
	Session : 10-Electrical or electronic and			
	AC, Component of AC	~ \		
	Session : 11-Active and Passive Safety	2		
	Employability Skill Unit-03	270		
	Session 05-Basic Computer operations	1 FSA		
	Session 06-Performing Basic File			
	Operations		~ \	
	Session 07-Communication and		SY \	
/-	Networking-Basic of Internet		2	\ \
1	Session 08-Communication and		Sh	
	Networking-Internet Browsing			
November 4	Automobile – Unit-4		05	07
1	Session : 1- Importance of Road safety,			
	Safety devices			
	Session :2-Safe and responsible driving,			
	Know your blind spot, fasten your seat			/
	belt.	10	/	
	Session : 3-Road sign	-		
	Session :4-Driving rule and registration,			
	Registration rule and process Driving			
	Licence			
	Employability Skill – Unit-03		/	
	Session 09-Communication and			
	Networking Introduction to E-mail	/		
	Session 10- Creating E-mail account			
	Session 11-Writing of an E-mail			
	Session 12-Receiving and Replying to			
	emails			



December	Automobile – Unit-5	15	03	06
	Session :-1-Air Pollution			
	Session : 2-Auto Emission and EU/BS			
	Standards, Emission norms in India			
	Session :3-PUC Certification			
	Unit-6			
	Session :1-Importance of vehicle			
	Maintenance and servicing ,Daily			
	inspection, maintenance check-up			
	Session : 2-Tips to extend life of vehicle			
	Employability Skill – Unit 04	~ \		
	Session 01- What is Entrepreneurship	2		
	Session 02- Role of Entrepreneurship	270		
	Session 03-Qualities of a successful	1CSA		
	Entrepreneur	11		
January	Automobile – Unit-6	10	~ /	02
	Session : 3-Introduction to vehicle service		SV \	
1	procedure, Filling job card		2	
/	Unit-7		an	
1	Session :-1-Innovation and development,			
	Electric car, hybrid vehicle, fuel cell, New			
	Development, G-CON			
	Employability Skill – Unit-04			
	Session 04-Distinguishing Characteristics			1
	of Entrepreneurship and Wage			
	Employment		/	¢
	Session 05-Types of Business Activities		/	
	Session 06-Product, Service and Hybrid			
	Businesses	1997 S		
	Session 07-Entrepreneurship Development	1.50		
	Process		/	
	Employability Skill –Unit-05			
	Session 01-Society and Environment			
	Session 02-Conserving and Natural			
	Resources			
	Session 03- Sustainable Development and			
	Green Economy			
February	Revision		10	
March	Annual Examination		10	
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#### Note:

Skill Subject Teachers are advised to direct the students to prepare Practical Notebook of the Terminology/Definitional Words/ Glossary used in the Chapters for Enhancement of Vocabulary or Clarity of the Concept.

• The PSSCIVE Skill Textbook Present Information in Boxes the book. These help Students to get Conceptual Clarity. However, the Information in these Boxes would not be Assessed in the Year- End Examination.

#### **Prescribed Books:**

- 1. Automobile Skill Book-Text Book for Class IX, PSSCIVE Publication.
- 2. Employability Skill Book- Text Book for Class IX, PSSCIVE Publication.





## **NSQF Question Paper Design (2025-26)**

Class-9<sup>th</sup>

Subject: Automotive

Code: AUT 926

## Time :- 2 Hours 30 Minutes

Competencies	Total
Knowledge	40%
Understanding	30%
Application	20%
Skill	10%
1.5	100%
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Type of	Marks	Number	Description	Total
Question	E C	22		Marks
Objective	1	15	6 Multiple Choice	15
Questions			Questions,	
	A	5	3 Fill in the Blanks	k
1	1		Questions,	1
1	-		3 One Word Answer Type	
			Questions, 3 Assertion-	
1.			Reason Questions true/false	
Very Short	2	6	Internal choice will be given	12
Answer Type	12		in any 2 questions	
Question	1200			/
Short Answer	3	6	Internal choice will be given	18
Туре			in any 2 questions	
Question	1		0911	
Essay	5	3	Internal options will be	15
Answer Type			given in all the questions	
Question				
Total		30		60