



BOARD OF SCHOOL EDUCATION HARYANA

Syllabus and Chapter wise division of Marks (2024-25)

Class- 10th

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:

- i) For 6 marks- Three SAT exams will be conducted and will have a weightage of 06 marks towards the final Internal Assessment.
- ii) For 2 marks- One half yearly exam will be conducted and will 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).
- iv) For 5 marks- A project work to be done by students and will have a weightage of 05 marks towards the final Internal Assessment.
- v) For 5 marks- Attendance of student will be awarded 05 marks 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 (2024-25)

Class- 10th

Subject: Automotive

Code: AUT 926

Unit. No.	Unit Name	Unit Marks
1	Automobile and its component	20
2	Automobiles service tools	10
3	Vehicle Servicing	10
4	Customer Sales Care	05
5	Innovation and Development	05
Unit. No.	Employability Skill Units	Unit Marks
1.	Communication Skills	2
2.	Self-Management Skills	2
3.	Information and Communication Technology Skills	2
4.	Entrepreneurship Skills	2
5.	Green Skills	2
Total		60/2=30
Practical Examination		50
Internal Assessment		20
Grand Total		100



Unit 1: Automobile and its component

- Session 1: Chassis. Classifications of Chassis.
Session 2: Body or Superstructure -Different parts of Automobile body.
Session 3: Engine , technical terms used in engine.
Session 4: Lubrication System , Lubrication System, properties of good lubricant
Session 5: Cooling System , method of cooling
Session 6: Fuel Supply System
Session 7: Transmission system , Type of Transmission, Universal joint, type of universal joint.
Session 8: Front Axle. Front Axle, Stub axle
Session 09: Steering system, Type of steering.
Session 10: Rear axle .
Session 11: Suspension system.
Session 12: Wheel and Tyre ,Types of tyres.
Session 13: Brakes, Brakes, Requirements of good breaking system.
Session 14: Electrical and Electronics System , Battery operation

Unit 2: Automobiles service tools

- Session 1: General Tools- Hand tool
Session 2: Measuring Tools-Caliper, Screw gauge, Steel ruler.
Session 3: Electrical Tools- Multimeter, Tachometer, Hydrometer etc
Session 4: Special Tools
Session 5: Service Workshop Equipment

Unit 3: Vehicle Servicing

- Session 1: Washing of a Vehicle ,Precaution during washing.
Session 2: Changing of Oil and oil filter
Session 3: Changing of Air Filter
Session 4: Changing of Fuel Filter
Session 5: Changing of Coolant .

* How to change stepwise engine oil & oil filter , air filter, fuel filter and coolant.

Unit 4: Customer Sales Care

- Session 1: Customer Care: Customer Service, Important aspects of a customer's service, Duties of a salesperson.

Unit5: Innovation and Development

- Session 1: Innovation and Development:
Innovation and development , How innovation take place , Top 10 innovations , Top 5 best innovations in car safety technologies.



Unit 6 : Employability Skill

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

Practical's: -

1. Chassis
2. Body
3. Engine
4. Lubrication System
5. Cooling system
6. Fuel supply system
7. Transmission system
8. Front Axle
9. Steering system
10. Rear Axle
11. Suspension System
12. Wheel and Tyre
13. Brake
14. Hand Tools
15. Electrical Tools
16. Special Tools.
17. Washing of vehicle .
18. Two post Lift.
19. Four Post Lift.
20. New Innovation.



Month wise Syllabus Teaching Plan (2024-25)

Class- 10th

Subject: Automotive

Code: AUT 926

Month	Subject- content	Teaching Periods	Revision Periods	Practical Work
April	Automobile – Unit-2 Session :-1-Hand tools Unit-1- Session 1-Chassis,Classification of Chassis Session :-2-Body or Superstructure, Different parts of Automobile body. Employability Skill- Unit 1 Session 1 :- Methods of Communications Session 2:- Verbal Communications. Session 3:- Non Verbal Communication	16	2	3
May	Automobile –Unit -1 Session :3- Engine, technical terms used in engine Session : 4-Lubrication System, properties of good lubricant. Session : 5- Cooling system, method of cooling. Session : 6-Fuel supply system, Type of fuel supply system. Employability Skill – Unit 1 Session 4:- Communication cycle & importance of feed back Session5:- Barries to effective communication	16	2	3
June	Home Work – Practical unit 1-session 1 to 6 ES Revision Unit – Session – 1 to 5			
July	Automobile –Unit-1 Session : 7- Transmission system, Type of Transmission, Universal joint, type of universal joint Session:- 8- Front Axle, Stub axle Session:- 9-Steering System, Type of steering gear. Employability Skill – Unit 01 Session 06:- Writing Skills : Part of Speech Session 07:- Writing Skills :- Parts of Sentences	12	06	07



August	<p>Automobile –</p> <p>Unit-1-S-10- Rear axle</p> <p>S-11- Suspension system</p> <p>S-12- Wheel and Tyre ,Types of tyres.</p> <p>S-13-Brakes,Requirements of goobreaking system,</p> <p>S-14- Electrical and electronic system ,battery operation</p> <p>Employability Skill –</p> <p>Unit 2:- Session 01:- Stress Management</p> <p>Session 02 :- Self Awareness Strength and weakness</p> <p>Session 03:- Self Motivation</p> <p>Session 4:- Self Regulation Goal Setting</p>	16	04	04
September	<p>Revision for Half-Yearly Exam Automobile –</p> <p>Unit-2 S-2-Measuring tools, screw gauge.</p> <p>S-3-Electrical tools, multi meter, tachometer, hydrometer etc.</p> <p>S-4- Special tools.</p> <p>Employability Skill –</p> <p>Revision of Half Yearly</p>	14	06	03
October	<p>Automobile –</p> <p>Unit-2-S-5- Service workshop Equipment</p> <p>Unit-3-S-1- Washing of Vehicle ,Precaution during washing.</p> <p>S-2- Changing of oil and oil filter ,How to change engine oil yourself.</p> <p>Employability Skill –</p> <p>Unit 03:- Session :- Basic Computer Operations</p> <p>Sessions 02:- Performing Basic file operations</p>	12	02	06
November	<p>Automobile –</p> <p>Unit-3-S-3- Changing of air filter, step</p> <p>S-4- Changing of fuel filter ,step. Changing of coolant, step</p> <p>Employability Skill –</p> <p>Unit 03:- Session 03:- Computer care and file management Session04:- Computer Security and Privacy</p>	10	05	07
December	<p>Automobile –</p> <p>Unit-4-S-1- Customer Service, Important aspects of a customer’s service .</p> <p>Employability Skill –</p> <p>Unit 03 Session 05 :- Self Regulation Goal setting</p> <p>Unit 4 Session 1:-Entrepreneurship and Society</p>	15	03	06



January	Automobile – Unit-5-S-1- Innovation and development ,How innovation take place ,top 10 innovations ,top 5 best innovations in car safety technologies . Employability Skill – Unit 04:- Session 2:- Qualities and Functions of an Entrepreneur Session 03:- Myths about Entrepreneurship Session 04:- Entrepreneurship as a carrer option (including Unit 05:- Green Skill Session 01 :- Sustainable Development Session 02:- Our Role to Sustainable Development (including full revision of syllabus)05 02 March Final E	10		02
February	Revision		10	
March	Annual Examination			

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. Security Skill Book- Text Book for Class X, PSSCIVE Publication.
2. Employability Skill Book- Text Book for Class X, PSSCIVE Publication.



NSQF Question Paper Design (2024-25)

Class- 10th

Subject: Automotive
Time 2 Hours 30 Minutes

Code: AUT 926

Competencies	Total
Knowledge	40%
Understanding	30%
Application	20%
Skill	10%
	100%

Type of Question	Marks	Number	Description	Total Marks
Objective Questions	1	15	6 Multiple Choice Questions, 3 Fill in the Blanks Questions, 3 One Word Answer Type Questions, 3 Assertion- Reason Questions true/false	15
Very Short Answer Type Question	2	6	Internal choice will be given in any 2 questions	12
Short Answer Type Question	3	6	Internal choice will be given in any 2 questions	18
Essay Answer Type Question	5	3	Internal options will be given in all the questions	15
Total		30		60