

## QUESTION PAPER DESIGN

<b>Subject</b>	:	<b>Automobile</b>
<b>Level</b>	:	<b>1</b>
<b>Class</b>	:	<b>IX</b>
<b>Time</b>	:	<b>2 Hrs. 30 Minutes</b>
<b>Marks</b>	:	<b>60</b>

### 1. Weightage to Objectives:

Objective	K	U	A + S	Total
Percentage of Marks	40%	30%	30%	100%
Marks	24	18	18	60

### 2. Weightage to form of Questions:

Forms of Questions	E	SA	VSA/O	O	Total
No. of Questions	2 (5 each)	7(3 each)	05(1 Each)	24	38
Marks Allotted	10	21	05	24	60
Estimated Time	50 min	45 min	15 min	40 min	150 mints

### 3. Weightage to Content:

	<u>Marks</u>
1. History of Evolution of Automobile	04
2. Various Type of Automobile	08
3. Systems and Components of Automobile	12
4. Road Safety	10
5. Automobile and our Environment	04
6. Vehicle Maintenance and Servicing (Basic)	08
7. Innovations and Development in Automobile	04
8. Employability Skill	10

Total = 60

### 4. Scheme of Sections :

X X X

### 5. Scheme of Sections :

Option of Internal Choice in essay type questions

### 6. Difficulty level :

Difficult : 10 % marks  
Average : 50 % marks  
Easy : 40 % marks

*The Q.P. Design comes with whole syllabus.*

## QUESTION PAPER DESIGN

Subject	:	Automobile
Level	:	2
Class	:	X
Time	:	2 Hrs. 30 Minutes
Marks	:	60

### 1. Weightage to Objectives:

Objective	K	U	A + S	Total
Percentage of Marks	40%	30%	30%	100%
Marks	24	18	18	60

### 2. Weightage to form of Questions:

Forms of Questions	E	SA	VSA/O	O	Total
No. of Questions	2(6each)	5(3 each)	13	20	40
Marks Allotted	12	15	13	20	60 Marks
Estimated Time	40 min	30 min	28 min	52min	150 min

### 3. Weightage to Content:

	Marks
1 Automobile and Its Components	20
2 Automobile Service Tools	10
3 Vehicle Servicing	10
4 Customer Sales Care	05
5 Innovation And Development	05
6 Employability Skills	10
<b>Total =</b>	<b>60</b>

### 4. Scheme of Sections :

X X X

### 5. Scheme of Sections :

Option of Internal Choice in essay type questions

### 6. Difficulty level :

Difficult : 10 % marks  
Average : 50 % marks  
Easy : 40 % marks

Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skill), E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

"It is certified that this question paper Design covers the whole syllabus"

## QUESTION PAPER DESIGN

Subject	:	Automobile
Level	:	3
Class	:	XI
Time	:	2 Hrs. 30 Minutes
Marks	:	60

### 1. Weightage to Objectives:

Objective	K	U	A + S	Total
Percentage of Marks	40%	30%	30%	100%
Marks	24	18	18	60

### 2. Weightage to form of Questions:

Forms of Questions	E	SA	VSA/O	O	Total
No. of Questions	2(6each)	6(3 each)	5(2each)	20	33
Marks Allotted	12	18	10	20	60 Marks
Estimated Time	40 min	36 min	22 min	52min	150 min

### 3. Weightage to Content:

	Marks
1 Introduction to Engineering Geometrics and Drawing	08
2 Materials for Construction of Automotive Components	08
3 Regular Maintenance of Engine	07
4 Regular Maintenance of Transmission System	05
5 Regular Maintenance of Gear Box	05
6 Servicing of Wheels	05
7 Regular Maintenance of Tube and Tyre	06
8 Regular Maintenance of Brakes	06
9 Employability Skills	10

Total = 60

### 4. Scheme of Sections :

X X X

### 5. Scheme of Sections :

Option of Internal Choice in essay type questions

### 6. Difficulty level :

Difficult : 10 % marks

Average : 50 % marks

Easy : 40 % marks

**Abbreviations:** K (Knowledge), U (Understanding), A (Application), S (Skill), E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

## QUESTION PAPER DESIGN

Subject	:	Automobile
Level	:	4
Class	:	XII
Time	:	2 Hrs. 30 Minutes
Marks	:	60

### Weightage to Objectives:

Objective	K	U	A	S	Total
Percentage of Marks	25%	30%	30%	15%	100%
Marks	15	18	18	09	60

### Weightage to form of Questions:

Forms of Questions	E	SA	VSA/O	O	Total
No. of Questions	2 (6 each)	6 (3 each)	10(2 each)	10	28
Marks Allotted	12	18	20	10	60
Estimated Time	40 min	36 min	42 min	32 min	150 mints

**\*10 minutes for paper reading**

### Weightage to Content:

	<u>Marks</u>
1. Service Manual (U-1)	02
2. Inspection & Repair of Fasteners(U-2)	03
3. Measuring Equipments (U-3)	10
4. Auto Electrical system session (U-4)	15
5. Suspension system(U-4)	10
6. Service ability, replacement or repair of Components (U-5)	10
7. Transmission system (U-6)	10
Total =	60

### Scheme of Sections :

X X X

### Scheme of Sections :

Option of Internal Choice in essay type questions

### Difficulty level :

Difficult : 10 % marks

Average : 50 % marks

Easy : 40 % marks

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Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skill), E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

# **Board of School Education, Haryana**

## **CURRICULUM FOR SESSION 2020-2021**

Subject : Automobile  
Level : 1  
Class : 9<sup>th</sup>

### **Employability Skills**

Unit	Unit Name	Deleted Portion (SESSION/ SUB-UNIT)
Unit 1	Communication Skills	Session 7: Greetings and Introduction Session 8: Talking about Self Session 9: Asking Questions I Session 10: Asking Questions II
Unit 2	Self-Management Skills	Session 5: Personal Hygiene Session 6: Grooming
Unit 3	Information and Communication Technology Skills	Session 9: Communication and Networking — Introduction to e-mail Session 10: Communication and Networking — Creating an e-mail Account Session 11: Communication and Networking — Writing an e-mail Session 12: Communication and Networking — Receiving and Replying to e-mails
Unit 4	Entrepreneurship Skills	Session 7: Entrepreneurship Development Process
Unit 5	Green Skills	Session 1: Society and Environment

### **Subject Specific Skills (Automobile)**

Unit	Unit Name	Deleted Portion SESSION/ SUB-UNIT
1	History and Evolution of Automobile	Session-2- Wheel Cart Session -4- Innovation of Automobile (Post World war-II)
2	Various Types of Automobiles	Session-5- Special Vehicles
3	Major Systems and Components of an Automobile	Session-6- Transmission System Session-10- Electrical or Electronic and Air Conditioning Systems Session-11- Active and Passive Safety
4	Road Safety	Session-3- Road Signs
5	Automobile and Environment	Session-2- Auto Emissions and EU/BS Standards Session-3- PUC Certification
6	Introduction to Vehicle Maintenance And Servicing	Session-3- Introduction to Vehicle Service Procedure
7	Innovation and Development in Automobiles	-----

Note- To be assessed in Practical only. No question shall be asked from this portion in Theory Exams

# **Board of School Education, Haryana**

## **CURRICULUM FOR SESSION 2020-2021**

**Subject : Automobile**

**Level : 2**

**Class : 10<sup>th</sup>**

### **Employability Skills**

<b>Unit-1</b>	<b>Communication Skills</b>	<b>Session 6:</b> Writing Skills — Parts of Speech <b>Session 7 :</b> Writing Skills — Sentences
<b>Unit-2</b>	<b>Self-management Skills</b>	<b>Session 4 :</b> Self-regulation — Goal Setting <b>Session 5 :</b> Self-regulation — Time Management
<b>Unit-3</b>	<b>Information and Communication Technology Skills -</b>	<b>Session 4 :</b> Computer Security and Privacy
<b>Unit-4</b>	<b>Entrepreneurial Skills</b>	<b>Session 3:</b> Myths about Entrepreneurship <b>Session 4 :</b> Entrepreneurship as a Career Option
<b>Unit-5</b>	<b>Green Skills</b>	-

### **Subject Specific Skills (Automobile)**

<b>Unit</b>	<b>Unit Name</b>	<b>Deleted Portion</b> SESSION/ SUB-UNIT
<b>1</b>	<b>Automobile and their Components</b>	<b>Session-7- Transmission System</b> <b>Session -8- Front Axle</b> <b>Session-10-Rear Axle</b> <b>Session-11- Suspension System</b> <b>Session-14- Electrical and Electronics System</b>
<b>2</b>	<b>Automobile Service Tools</b>	<b>Session-3- Electrical Tools</b> <b>Session-4- Special Tools</b>
<b>3</b>	<b>Vehicle Servicing</b>	<b>Session-5- Changing of Coolant</b>
<b>4</b>	<b>Customer Sales Care</b>	-----
<b>5</b>	<b>Innovation and Development</b>	-----

Note- To be assessed in Practical only. No question shall be asked from this portion in Theory Exams

# **Board of School Education, Haryana**

## **CURRICULUM FOR SESSION 2020-2021**

**Subject : Automobile**  
**Level : 3**  
**Class : 11<sup>th</sup>**

### **Employability Skills**

<b>Unit-1</b>	<b>Communication Skills</b>	<b>Session 11:</b> Asking Questions <b>Session 12:</b> Talking about Family <b>Session 13:</b> Describing Habits and Routines <b>Session 14:</b> Asking for Directions
<b>Unit-2</b>	<b>Self-management Skills</b>	<b>Session 6:</b> Self-motivation <b>Session 7:</b> Goal Setting <b>Session 8:</b> Time Management
<b>Unit-3</b>	<b>Information and Communication Technology Skills</b>	<b>Session 6:</b> Inserting Lists, Tables, Pictures, and Shapes <b>Session 7:</b> Header, Footer and Page Number <b>Session 8:</b> Tracking Changes in LibreOffice Writer
<b>Unit-4</b>	<b>Entrepreneurial Skills</b>	<b>Session 5:</b> Coming Up with a Business Idea <b>Session 6:</b> Understanding the Market <b>Session 7:</b> Business Planning
<b>Unit-5</b>	<b>Green Skills</b>	<b>Session 4:</b> Government and Private Agencies

### **Subject Specific Skills (Automobile)**

<b>Unit</b>	<b>Unit Name</b>	<b>Deleted Portion SESSION/ SUB-UNIT</b>
<b>1</b>	<b>Introduction to Engineering Geometrics and Drawing</b>	<b>Session-2- Engineering Drawing</b>
<b>2</b>	<b>Materials for construction of Automotive Component</b>	<b>Session-1- Engineering Materials</b>
<b>3</b>	<b>Regular Maintenance of an Engine</b>	<b>Session-7- Tightening of fastener (Nuts/Bolts/Screws)</b>
<b>4</b>	<b>Regular Maintenance of Transmission System</b>	<b>Session-1- Transmission System</b>
<b>5</b>	<b>Regular Maintenance of Gearbox</b>	<b>Session-1- Setting of Gearbox</b>
<b>6</b>	<b>Servicing of Wheel</b>	<b>Session-1- Importance of hub Greasing and Bearing Play Adjustments</b>
<b>7</b>	<b>Regular Maintenance of tubes and tyres</b>	-----
<b>8</b>	<b>Brake and its Maintenance</b>	-----

Note- To be assessed in Practical only. No question shall be asked from this portion in Theory Exams

# **Board of School Education, Haryana**

## **CURRICULUM FOR SESSION 2020-2021**

**Subject : Automobile**  
**Level : 4**  
**Class : 12<sup>th</sup>**

### **Subject Specific Skills (Automobile)**

<b>Unit</b>	<b>Unit Name</b>	<b>Deleted Portion SESSION/ SUB-UNIT</b>
<b>1</b>	<b>Service Manual</b>	-----
<b>2</b>	<b>Inspection and Repair of Fasteners</b>	<b>Session-4- Automotive Washer and Rivets</b>
<b>3</b>	<b>Measuring Equipments</b>	-----
<b>4</b>	<b>Serviceability, Replacement or Repair of Engine Components</b>	<b>Session-3- Inspection and replacement of Sleeves, Connecting rod of Engine Components Session-6- Servicing of CRDI and Non CRDI System</b>
<b>5</b>	<b>Transmission System</b>	<b>Session-2- Servicing of Propeller shaft ,Universal and Slip Joints</b>
<b>6</b>	<b>Suspension system</b>	<b>Session-3- Replacement of strut/shock absorber , steering linkage Session-6- Steering system adjustment</b>
<b>7</b>	<b>Auto Electrical</b>	<b>Session-3- Battery and its Maintenance Session-6- Circuit diagram of Charging system of automobile and checking of charging system Session-8- Circuit Diagram of ignition system and checking of ignition circuit Session-9- Maintenance and servicing of major Electrical accessories Session-10- Introduction to climate control system heating ventilation and conditioning in a vehicle</b>

Note- To be assessed in Practical only. No question shall be asked from this portion in Theory Exams