# **CBSE | DEPARTMENT OF SKILL EDUCATION**

# **AUTOMOTIVE (SUBJECT CODE - 404)**

Blue-print for Sample Question Paper for Class X (Session 2022-2023)

Max. Time: 2 Hours Max. Marks: 50

### PART A - EMPLOYABILITY SKILLS (10 MARKS):

UNI T NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS 1 MARK EACH	SHORT ANSWER TYPE QUESTIONS 2 MARKS EACH	TOTAL QUESTIO NS
1	Communication Skills - II	-	-	-
2	Self-Management Skills - II	2	2	4
3	ICT Skills - II	2	1	3
4	Entrepreneurial Skills - II	2	2	4
5	Green Skills - II	-	-	-
	TOTAL QUESTIONS	6	5	11
NO. OF QUESTIONS TO BE ANSWERED		Any 4	Any 3	07
TOTAL MARKS		1 x 4 = 4	2 x 3 = 6	10 MARKS

### PART B - SUBJECT SPECIFIC SKILLS (40 MARKS):

UNI T NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS 1 MARK EACH	SHORT ANSWER TYPE QUESTIONS 2 MARKS EACH	DESCRIPTIVE/ LONG ANS. TYPE QUESTIONS 4 MARKS EACH	TOTAL QUESTIO NS
1	Automobile and its components	6	2	1	8
2	Tools	5	1	1	7
3	Vehicle Servicing	5	1	1	7
4	Customer Sales Care	4	1	1	6
5	Innovation and Development	4	1	1	7
TC	OTAL QUESTIONS	24	6	5	35
NO. OF QUESTIONS TO BE ANSWERED		20	Any 4	Any 3	27
TOTAL MARKS		1 x 20 = 20	2 x 4 = 8	4 x 3 = 12	40 MARKS

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## Sample Question Paper for Class X (Session 2022-2023)

Max. Time: 2 Hours Max. Marks: 50

#### **General Instructions:**

- 1. Please read the instructions carefully.
- 2. This Question Paper consists of 21 questions in two sections: Section A & Section B.
- **3.** Section A has Objective type questions whereas Section B contains Subjective type questions.
- 4. Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
- **5.** All questions of a particular section must be attempted in the correct order.

#### 6. SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):

- i. This section has 05 questions.
- ii. Marks allotted are mentioned against each question/part.
- iii. There is no negative marking.
- iv. Do as per the instructions given.

#### 7. SECTION B - SUBJECTIVE TYPE QUESTIONS (26 MARKS):

- i. This section has 16 questions.
- ii. A candidate has to do 10 questions.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

# **SECTION A: OBJECTIVE TYPE QUESTIONS**

Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1	x 4
	= 4 marks)	
i.	In "ABC" of stress management, "A- Adversity stands for	1
	a. The stressful event	
	b. The way you respond to the event	
	c. Actions and outcomes of the event	
	d. Have a joyful life.	
ii.	Yoga is practiced to achieve control of	1
	a. Muscles	
	b. Bones	
	c. Mind	
	d. Body and mind	
iii.	Which of the following is an example of a mobile operating system?	1
	a. Windows	
	b. UNIX	
	c. LINUX	
	d. iOS	
iv.	By default, Windows 7 has a picture for the desktop background. Name	1
	that picture.	
V.	In Which type of entrepreneurship, research is conducted to completely	1
	define a specific and core collective problem?	
	a. Social	
	b. Agricultural	
	c. Small Scale	
	d. Women	
vi.	Identify the women entrepreneur known as the "Queen of Herbal Beauty	1
	Care".	
	a. Radhika Agarwal	
	b. Aditi Gupta	
	c. Shahnaz Hussain	
	d. Falguni Nayar	

Q. 2	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	In which design of chassis is the whole engine installed in the driver cabin?  a. Full forward chassis b. Semi forward chassis c. Bus chassis d. Monocoque chassis	1
ii.	Which of the following welding techniques is used to combine the body structural assemblies into an integrated shell?  a. Electric arc welding b. Oxy- acetylene gas welding c. Electric spot welding d. Soldering	1

iii.	Define engine torque.	1
iv.	SAE 20, SAE 30, SAE 50 all are classified as oils. a. Multi grade	1
	b. Mono grade c. Gear d. Natural	
V.	Which of the following percentage of fuel energy is lost in exhaust gases?  a. 5% b. 15% c. 25% d. 35%	1
vi.	Choose the element that has the greatest influence on gradient resistance.  a. Material of the road surface b. Quality of the road surface c. Material and design of tyres tread d. Mass of the vehicle	1

Q. 3	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Name the equipment used for lifting an automobile and carry out the work under the chassis.	1
ii.	Identify the special tool shown in the figure given below.  a. Torque wrench b. Tappet Wrench c. Universal clutch holding tool d. Flywheel puller	1
iii.	Normally, wheel helps in minimizing tire vibration and bounce.  a. Balancing b. Alignment c. Rotation d. size	1
iv.	Out of the following applications the rotary screw air compressor become the most preferred source of compressed air?  a. Automotive applications b. Industrial applications c. Domestic applications d. Marine applications	1
V.	Choose the tool used to precisely apply a specific twisting force to a fastener.  a. Pneumatic wrench b. Adjustable wrench c. Torque wrench d. Open-ended wrench	1
vi.	While checking the engine oil of a car, the hand brakeand the engine are suggested.  a. On, off b. Off, on c. Off, off d. On, on	1

Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	It is advised to clean the sidewalls of tyres with	1
	a. Plastic brush	
	b. Wire brush	
	c. Cloth	
	d. Steel wool	
ii.	The air filter assembly is locatedof the engine.	1
	a. on the LH side	
	b. on the RH side	
	c. on the Top	
	d. Close to the oil sump	
iii.	Which of the following filter assemblies can be found in the engine	1
	compartment or near the fuel tank?	
	a. Air	
	b. Oil	
	c. Fuel	
	d. Water	
iv.	Mention any two characteristics that an ideal engine coolant should	1
	have in it.	
V.	Pick the employees who will help consumers with the purchase or	1
	maintenance of their vehicles.	
	a. Customer service executive	
	b. Service Advisor	
	c. Technician	
	d. Dealership manager	
vi.	Which of the following results from a positive customer relationship?	1
	a. Tension for the executive	
	b. Headache for the outlet	
	c. Repeated complaints to the outlets	
	d. A good sale for the outlet	

Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Choose the employee that never leaves a customer with an	1
	unanswered query.	
	a. Technician	
	b. Service Advisor	
	c. Dealership manager	
	d. Customer service executive	
ii.	A customer service professional or a sales executive dealer may also	1
	be called.	
	a. Information expert	
	b. sales manager	
	c. Service advisor	
	d. Expert technician	
iii.	Give the temperature range that automotive microprocessors must	1
	withstand.	
iv.	Select the correct complete form of the SAE.	1
	a. Society of Automotive Engineers	
	b. Society of Automobile Engineering	
	c. Society of Automatic Engineering	
	d. Society of Artificial Intelligence Engineers	

V.	Innovation leads to of a technology. a. Development b. Degradation c. Deterioration d. Descent	1
vi.	Bringing a new model of a car to market often takes this much time in laboratories.  a. 6-9 months b. 1-2 years c. 2-3 years d. 5-7 years	1

## **SECTION B: SUBJECTIVE TYPE QUESTIONS**

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 - 30 words.

Q. 6	Define the term "Self-Motivation".	2
Q. 7	Enlist <b>any two</b> advantages of stress management.	2
Q. 8	Name <b>any two</b> ways by which a computer can get infected with virus.	2
Q. 9	List <b>any two</b> positive impacts of entrepreneurship on society.	2
Q. 10	Elucidate Agricultural Entrepreneurship.	2

### Answer any 4 out of the given 6 questions in 20 - 30 words each $(2 \times 4 = 8 \text{ marks})$

Q. 11	Describe automatic transmission briefly.	2
Q. 12	Enlist <b>any two</b> functions of the front axle of RWD automobile.	2
Q. 13	Write <b>any two</b> advantages of using special tools in automobile workshops.	2
Q. 14	List the various precautionary measures that must be taken when washing an automobile. (At least two)	2
Q. 15	In your own words, illustrate the usefulness of the term "Anticipate Guest Needs."	2
Q. 16	Address at least two advancements in the area of alternative fuels.	2

### Answer any 3 out of the given 5 questions in 50-80 words each $(4 \times 3 = 12 \text{ marks})$

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Q. 17	Explain the discharging and charging action of a lead-acid battery.	4
Q. 18	Write the uses of the following special tools/ equipment:	4
	a. Universal clutch holding tool	
	b. Flywheel puller	
	c. Pneumatic wrench	
	d. Two post lift	
Q. 19	Explain the importance of changing engine coolant.	4
Q. 20	Alfred was picked for an interview for the position of salesperson in an	4
	automobile dealership. The interviewer asked him to tell (any four) areas	
	in which he is valuable to the organization as a salesperson. Explain.	
Q. 21	Give a brief explanation of recent advances in automobile safety	4
	technologies. Name four features that are linked to it.	