



Registration No.:

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Automotive Skills
Session: 2021-22 (Winter Semester)
B. Voc. Program, 3rd Semester,
2nd In-Sem. Examination

Course Code: AUT1301

Time: 1 Hour

Course Name: Automotive Power Train

Max. Marks: 20

Instruction:

1. Answer all questions from section – A, each question carries one mark.
2. Answer all questions from section – B, each question carries two marks.
3. Answer all questions from section – C, each question carries three marks.

Section – A

05x01 = 05 Marks

Q 1. The reconditioning process used to give cylinder bore surfaces a crosshatch pattern, is known as

- A. Honing
- B. Porous plating
- C. Boring
- D. Shot peening

Q 2. The materials used for cylinder block are

- A. Cast iron and steel
- B. Cast iron and aluminum alloy
- C. Steel and aluminum alloy
- D. Brass and steel.

Q 3. The condition that results in large quantities of HC emission is

- A High temperature combustion
- B Incomplete combustion
- C Low temperature combustion
- D High atmospheric temperature combustion

Q 4. The exhaust gas from petrol engine contains

- A Petrol vapours
- B Water vapours
- C Carbon monoxide
- D All of these

Q 5. The main function of a resonator is that it

- A Regulates the intake air flow rate
- B Reduces the intake air noise
- C Enhances intake efficiency
- D Regulates the intake air temperature

Section – B

03X02 = 06 Marks

Q 6. What is the function of air induction system?

Q 7. Write different components of EVAP System.

Q 8. What is the purpose of EVAP System?

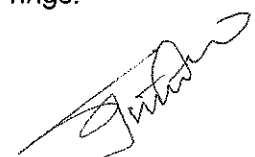
Section – C

03X03 = 09 Marks

Q 9. Explain the working of throttle body.

Q.10 What are the various Types of air-induction system

Q 11. Explain the standard operating procedure of checking piston rings.





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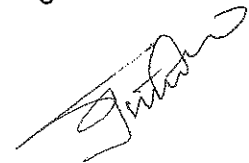
Section – C

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School of Automotive Skills

Session: 2021-22 (Winter Semester)

B. Voc. Program, 3rd Semester,

2nd In-sem. Examination

Course Code: AUT 1302

Time: 1 Hour

Course Name: Automotive Breaking, Suspension

Max. Marks: 20

and Steering System

Instruction:

1. All the questions are compulsory to attend.
2. Students are not allowed to bring any smart device or cell phone in the exam hall.
3. Marks will be deducted if any overwriting in words will be found.

Section – A

05X01 = 05 Marks

1. The assembly of coil spring and damper is called...
 - a) Shock absorber
 - b) Strut
 - c) a & c
 - d) None of the above
2. Vulcanizing liquid is being used in the process of.....
 - a) Tire patch repair
 - b) Hot re-treading
 - c) a & b
 - d) None of the above
3. Does the spring rate change as the vehicle gets older?
 - a) Yes
 - b) No
 - c) Depends upon the diameter of coil
 - d) Depends upon the number of coil



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Session: 2021-22 (Winter Semester)
B. Voc. Program, 3rd Semester,
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Course Code: AUT 1302

Time: 1 Hour

**Course Name: Automotive Breaking, Suspension
and Steering System**

Max. Marks: 20

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Section – A

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BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Automotive Skills

3rd Semester, 2nd In-Sem. Examination

B. Voc. Program, Winter Semester (2021-22)

Course Code: AUT1303

Time: 1 Hour

Course Name: Automotive Body Works

Max. Marks: 20

Instruction:

1. Answer all questions from "Section-A", each question carries 01 mark.
2. Answer all questions from "Section-B", each question carries 02 marks.
3. Answer all questions from "Section-C", each question carries 03 marks.

Section – A

05X01 = 05 Marks

Q1. What is the first step in preparing a bare metal surface from corrosion protection?

- a) Clean with lacquer thinner
- b) Clean with soap and water
- c) Sand with coarse sand paper
- d) Clean with wax and grease removal

Q2. is the event in which two or more bodies exert forces on each other in about a relatively short time.

- a) Denting
- b) Bending
- c) Clamping
- d) Collision

Q3. is an essential tool for the quick removal of paint, primer and old body filler from an area being repaired?

- a) Sliding hammers
- b) Sander
- c) Shears
- d) Nibblers

Q4. Which of the following would you use first when preparing bare metal surface for corrosion protection?

- | | |
|--------------------------------------|----------------------------------|
| a) Sand with coarse sand paper | c) Clean with lacquer thinner |
| b) Clean with wax and grease remover | d) Clean with soap and hot water |



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Q5. A stamping tool is used forthe dented panel.

- a) Restoring Bodyline
- b) Making Holes
- c) Pulling out dents
- d) Pressing

Section – B

03X02 = 06 Marks

Q6. Mention the differences between dolly-on and dolly-off hammering.

Q7. What are the advantages and disadvantages of chemical stripping?

Q8. Write short note on sanding and grinding.

Section – C

03X03 = 09 Marks

Q9. How to repair rusted Panels?

Q10. Write steps to remove front bumper assembly.

Q11. Explain window mechanism with diagram

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of Automotive Skills****3rd Semester, 2nd In-Sem. Examination****B. Voc. Program, Winter Semester (2021-22)****Course Code: AUT1303****Time: 1 Hour****Course Name: Automotive Body Works****Max. Marks: 20****Instruction:**

1. Answer all questions from "**Section-A**", each question carries 01 mark.
2. Answer all questions from "**Section-B**", each question carries 02 marks.
3. Answer all questions from "**Section-C**", each question carries 03 marks.

Section – A**05X01 = 05 Marks**

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School of Automotive Skills

Session: 2021-22 (Winter Semester)

B. Voc. Program, 3rd Semester,

2nd In-Sem. Examination

Course Code: AUT1304

Time: 1 Hour

Course Name: Automotive Refinish Painting

Max. Marks: 20 marks

Instruction:

1. Answer all questions from section A, each question carries one mark
2. Answer all question from section B, each question carries two mark.
3. Answer all question from section C, each question carries three mark.

Section – A

05X01 = 05 Marks

Q-1. What does 1-k represent?

- | | |
|--------------------------|-----------------------------|
| a. 1000 | c. Product without hardener |
| b. Product with hardener | d. None of these |

Q-2. Wash primer is a.....primer?

- | | |
|--------|----------------------|
| a. 1 K | c. Both A & B |
| b. 2 K | d. None of the above |

Q-3. What is the best way of removing the dust particles after putty dry sanding?

- | | |
|--------------------------|----------------------------|
| a. Air blowing | c. Cleaning with degreaser |
| b. Cleaning with thinner | d. Both (a) and (c) |

Q-4. What is the mixing ratio (in gram) of polyester putty & hardener?

- | | |
|-----------|------------------------|
| a. 100: 2 | c. 100:12 |
| b. 100:10 | d. As per manufacturer |

Q-5. Which of the following paint layer is not a part of refinish painting?

- | | |
|------------------------|--------------------|
| a. Electro Phosphating | c. Polyester putty |
| b. Epoxy primer | d. Body filler |

Section – B

03X02 = 06 Marks

- Q-6. What is the difference between body filler and putty?
- Q-7. Write down the SOP of Minor Repair?
- Q-8. What is the difference between wash Primer and Surfacer?

Section – C

03X03 = 09 Marks

- Q-9. What are the factors that influences the colors?
- Q-10. What are the causes of runs on the panel? Explain its precaution and remedies.
- Q-11. Explain at least three different types of paint defects and its causes.

A handwritten signature in black ink, appearing to be 'S. J. ...', is written diagonally across the page.



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Course Code: AUT1304

Time: 1 Hour

Course Name: Automotive Refinish Painting

Max. Marks: 20 marks

Instruction:

1. Answer all questions from section A, each question carries one mark
2. Answer all question from section B, each question carries two mark.
3. Answer all question from section C, each question carries three mark.

Section – A

05X01 = 05 Marks

Q-1. What does 1-k represent?

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| b. Product with hardener | d. None of these |

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Section – B

03X02 = 06 Marks

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Section – C

03X03 = 09 Marks

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Session: 2021-22 (Winter Semester)
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2nd In-Sem. Examination

Course Code: AUT1305

Time: 1 Hours

Course Name: Automotive Electrical & A. C.

Max. Marks: 20

Instruction:

1. Attempt all the questions.
2. Draw neat and clean diagram.

Section – A

5X01 = 5 Marks

1. The capacity of vehicle battery is expressed in terms of:
 - a) Current rating
 - b) Voltage rating
 - c) Ampere hour rating
 - d) None of the above
2. If a battery is to be charged at a much higher rate as compared to normal charging rate, the charging should be restricted to:
 - a) 95% of the capacity of battery
 - b) 80% of the capacity of battery
 - c) 55% of the capacity of battery
 - d) 35% of the capacity of battery
3. The process of producing electric current through the variable magnetic field is called.....
 - (a) Electrification
 - (b) Patience
 - (c) Electromagnetic induction
 - (d) Parabolic
4. A transformer transform:
 - (a) Current
 - (b) Voltage
 - (c) Both A and B
 - (d) frequency
5. The property of materials in which the application of mechanical stress generates electricity is called:
 - a) Static electricity
 - b) Piezoelectricity
 - c) Conductivity
 - d) None of the above



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Section – B

02X03 = 06 Marks

1. Define transformer and function of a transformer.
2. Explain voltage generation through piezoelectric effect.
3. The charging and discharging of vehicle battery done through which internal electrical components? Name them.

Section – C

03X03 = 09 Marks

1. Explain principal of operation, working and chemical reaction of lead acid battery.
2. Explain faraday law of electromagnetic induction with neat sketch and the parameters on which its value depends.
3. A multimeter is used for measurement of various electrical properties, name them all.



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Course Code: AUT1305

Time: 1 Hours

Course Name: Automotive Electrical & A. C.

Max. Marks: 20

Instruction:

1. Attempt all the questions.
2. Draw neat and clean diagram.

Section – A

5X01 = 5 Marks

1. The capacity of vehicle battery is expressed in terms of:
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Section – B

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