UNIVERSITI KUALA LUMPUR
KAMPUS CAWANGAN MALAYSIAN SPANISH INSTITUTE

FINAL EXAMINATION

OCTOBER 2025 SEMESTER

COURSE CODE	:	SIB35203 (V2)
COURSE TITLE	:	AUTOMOTIVE PARTS AND SERVICE MANAGEMENT
PROGRAMME NAME	:	BACHELOR OF BUSINESS TECHNOLOGY (HONOURS) IN AUTOMOTIVE MANAGEMENT
DATE	:	30 JANUARY 2026
TIME	:	3:00PM - 5:00PM
DURATION	:	2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consist of ONE sections.
4. Section A consist of five questions. Answer FOUR (4) questions only.
5. Please write your answer on the answer booklet provided.
6. Please answer all questions in English only.
7. Refer to the attached Formula/ Appendies. ☐ *Tick if applicable*

THERE ARE 7 PAGES OF QUESTIONS INCLUDING THIS PAGE

SECTION A (Total: 100 marks)

Answer FOUR (4) questions.

Please use the answer booklet provided.

Question 1

Automotive service centre must be well managed to deliver a good service to the customer.

(a) Evaluate the importance of technology integration in modern service center management. Provide three examples of how it enhances operations.

(5 marks)

(b) Analyze the challenges of workforce management in a service center and suggest strategies to overcome them.

(6 marks)

(c) Explain why locating accurate service information and specifications is critical in technical service management.

(2 marks)

(d) Explain three examples of potential consequences if incorrect technical service information is used.

(6 marks)

(e) Explain three strategies can an automotive service center use to build customer loyalty and encourage repeat business.

(6 marks)

Question 2

The engine cooling system works by constantly passing coolant through channels in the engine block.

(a) How does a malfunctioning cooling system influence engine performance, and what common issues lead to it?

(6 marks)

(b) Engine overheating can be caused by a number of factors. Discover the top four reasons why engines overheat.

(4 marks)

(c) Find out the name and purpose of the component shown in the following figure.
Refer Below - Figure1 : Component X .

(2 marks)

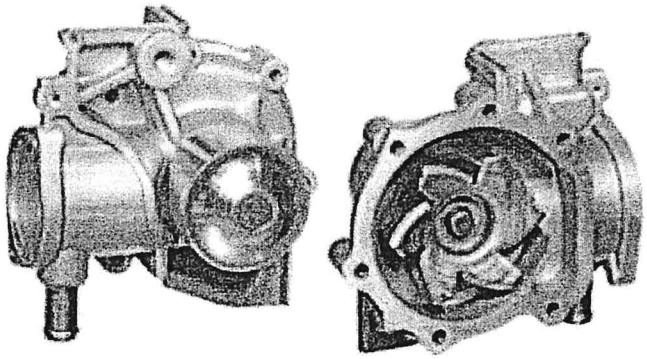

Figure 1: Component X

(d) Figure below shows an engine. There are two kinds of internal combustion engines currently in production: the spark ignition petrol engine and the compression ignition diesel engine.
Refer Below - Figure2 : Car engine .

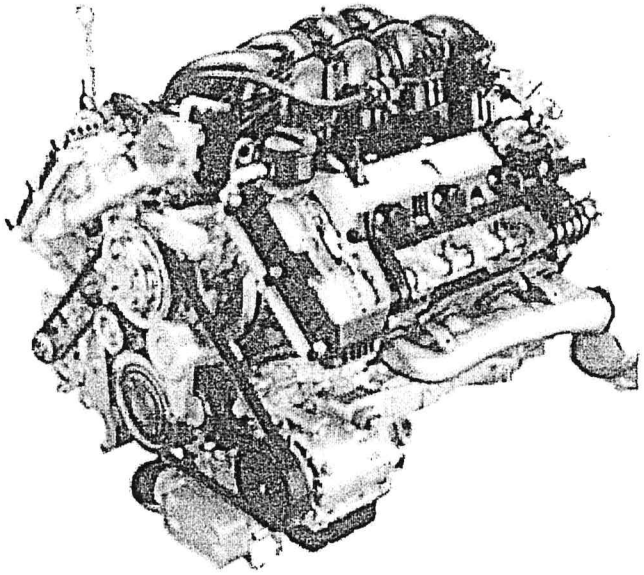

Figure 2: Car engine

i. Demonstrate how a spark ignition engine operates.

(3 marks)

ii. Discover four drawbacks of two stroke engines.

(4 marks)

iii. Discover what a piston head's function is.

(2 marks)

(e) Explain two typical vehicle electrical problems and the ways to detect and repair them.

(4 marks)

Question 3

The following questions are regarding air conditioning and car performance.

(a) Explain the working principle of a car air conditioning system. Why is the refrigeration cycle essential for its operation?

(6 marks)

(b) Discuss four common problems encountered in car air conditioning systems and suggest maintenance practices to prevent them.

(8 marks)

(c) Explain six procedures to conduct the compression test in sequence.

(6 marks)

(d) Evaluate the role of Anti-lock Braking Systems (ABS) in enhancing tire-road interaction.

(1 marks)

(e) How does ABS improve both safety and performance compared to conventional braking systems?

(4 marks)

Question 4

Alignment, steering and suspension are inter-related to assure good car handling and safety.

(a) There are a few types of suspension systems. What type of suspension system is commonly used in today's front-wheel drive cars? Explain the benefits of this type of suspension system.

(6 marks)

(b) What are the purposes of Spring in a suspension system? List down three purposes.

(3 marks)

(c) What is the name of the component shown in the figure below? What are the tips to make this component stronger?
Refer Below - Figure3 : Component Y .

(3 marks)

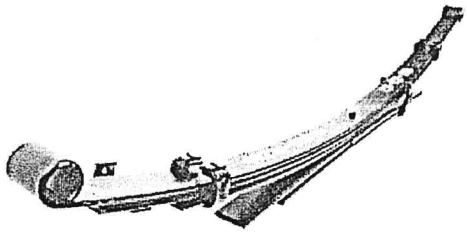

Figure 3: Component Y

(d) States five components of the drivetrain.

(5 marks)

(e) Explain four functions of drivetrain.

(4 marks)

(f) List down four types of automotive transmission.

(4 marks)

Question 5

Power steering is commonly used in modern cars to control tire movement.

(a) Explain the working principle of an electric power steering system.

(5 marks)

(b) Explain the method to adjust V-belt using screw-type adjustment.

(10 marks)

(c) What is the cause of tire wear at the center of the contacted surface?

(1 marks)

(d) Some car manufacturers install power steering system filters that must be inspected or replaced. Explain five procedures to service the power steering filter by sequence.

(5 marks)

(e) The idler arm is a common wear item. How to inspect the looseness of the idler arm?

(4 marks)

END OF EXAMINATION PAPER