

T162

08:30 – 11:30 AM

Names:

Index number

TVET NATIONAL EXAMINATION, RTOF LEVEL 5, 2020-2021

QUESTIONS and ANSWERS BOOKLET

OPTION/TRADE: AUTOMOBILE ELECTRICITY AND ELECTRONICS SYSTEMS

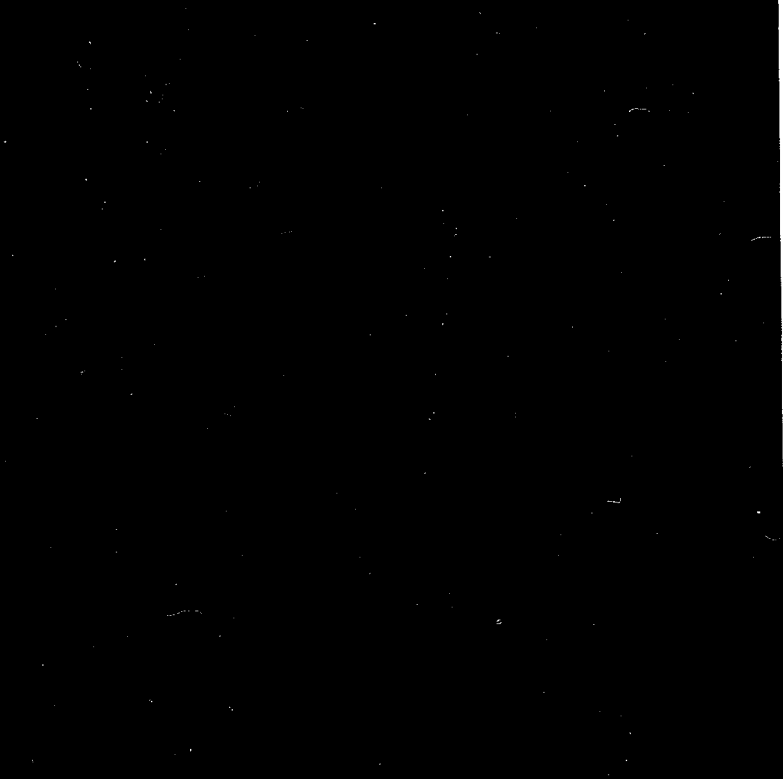
SUBJECT: Vehicle electronics stability and signaling system

ACADEMIC YEAR: 2020-2021

Read carefully the instructions on page (i) 2. (ii)

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TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

INSTRUCTIONS TO CANDIDATES: PART I (Answer Booklet)

1. A candidate should fill in the actual names and the index number on the cover of this questions and answer booklet on the provided place (Black Box).
2. It is illegal for a candidate to write any of his/her names, index number or a school name inside the answer booklet.
3. A candidate should check if all pages of the answer booklet are complete. No candidate should remove or tear any pages or part of it from the answer booklet.
4. A candidate should answer in the language in which the examination is set. (See page **(ii)**)
5. A candidate should sign on the sitting plan when submitting the answer booklet. He/she has also to check if the answer booklet is well sealed.
6. No extra paper is allowed in the examinations room. If a candidate is caught with it his/her results will be nullified.
7. No candidate is allowed to write answers not related to the subject being sat for, otherwise it will be considered as a cheating case.
8. Write your answers on the 12 lined pages (From page 1 of 12 to page 12 of 12).
9. Use the last non-lined pages as draft.
10. Results for any candidate who is caught in examination malpractices are nullified. The cheating can be recognized during examinations administration, marking exercise or even thereafter.

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

**OPTION/TRADE: AUTOMOBILE ELECTRICITY AND ELECTRONICS
SYSTEMS**

SUBJECT: Vehicle electronics stability and signaling system

DURATION: 3 hours

INSTRUCTIONS TO CANDIDATES: PART II (Question paper)

The paper is composed of two (2) Sections as follows:

Section I: Attempt all the Twelve (12) questions (60 marks)

**Section II: Attempt any Four (4) questions out of Six (6)
(40 marks)**

Allowed materials:

- Ruler or square
- Calculator

Note:

Every candidate is required to carefully comply with the provided assessment instructions.

Section I : Attempt all the Twelve (12) questions (60 marks)

- 01.** Enumerate any five (5) functions of lighting system in motor vehicle. **(5 marks)**
- 02.** Explain the difference between single wire and dual wires light bulb. **(5 marks)**
- 03.** What do you understand by “HID headlights” in vehicle lighting and signaling system? **(5 marks)**
- 04.** Give any two (2) examples of HID used in motor vehicle. **(5 marks)**
- 05.** List five (5) different lighting and signaling circuits found on motor vehicle. **(5 marks)**
- 06.** Use a neat sketch to explain the parts of metal filament bulb of motor vehicle. **(5 marks)**
- 07.** Enumerate five (5) main components of lighting and signaling system. **(5 marks)**

- 08.** Identify five (5) light sources of headlight and lights in vehicle. **(5 marks)**
- 09.** What are the types of headlight? **(5 marks)**
- 10.** List any five (5) different lighting circuits which are found on motor vehicle. **(5 marks)**
- 11.** What are the procedures of headlight removal? **(5 marks)**
- 12.** State the procedure of headlight installation. **(5 marks)**

Section II: Attempt any Four (4) questions out of Six (6)

(40 marks)

- 13.** Discuss the possible causes, tests and faults correction for the light Bulb which does not light up and with weak bulb light. **(10 marks)**
- 14.** By using a wiring diagram, explain brake light circuit. **(10 marks)**
- 15.** Draw a motor vehicle horn circuit and explain its operation. **(10 marks)**
- 16.** By using a wiring diagram, explain the operation of turn signal. **(10 marks)**
- 17.** By using sketch, show the circuit combining lighting and signaling system. **(10 marks)**
- 18.** By using a sketch explain the operation of flasher unit. **(10 marks)**

Do not write anything on this page !

