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|---|--------------|-----------------------------|--------------|
| REGISTRATION CENTRE NUMBER | | CENTRE NAME | |
| CANDIDATE'S FULL NAMES | | | |
| CANDIDATE IDENTIFICATION NUMBER | SUBJECT CODE | PAPER NUMBER | |
| | 5135 | 3 | |
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| FOR OFFICIAL USE ONLY | | | |
| GENERAL CERTIFICATE OF EDUCATION BOARD Technical and Vocational Education Examination INTERMEDIATE LEVEL | | | |
| SUBJECT TITLE | | SUBJECT CODE | PAPER NUMBER |
| Electrical/Electronic Technology | | 5135 | 3 |
| Specialty: AUTOMOBILE REPAIR MECHANICS (ARM) | | EXAMINATION DATE: JUNE 2024 | |

FOLD
HERE

Duration: 3 Hours

ANSWER BOOKLET

INSTRUCTIONS TO CANDIDATES

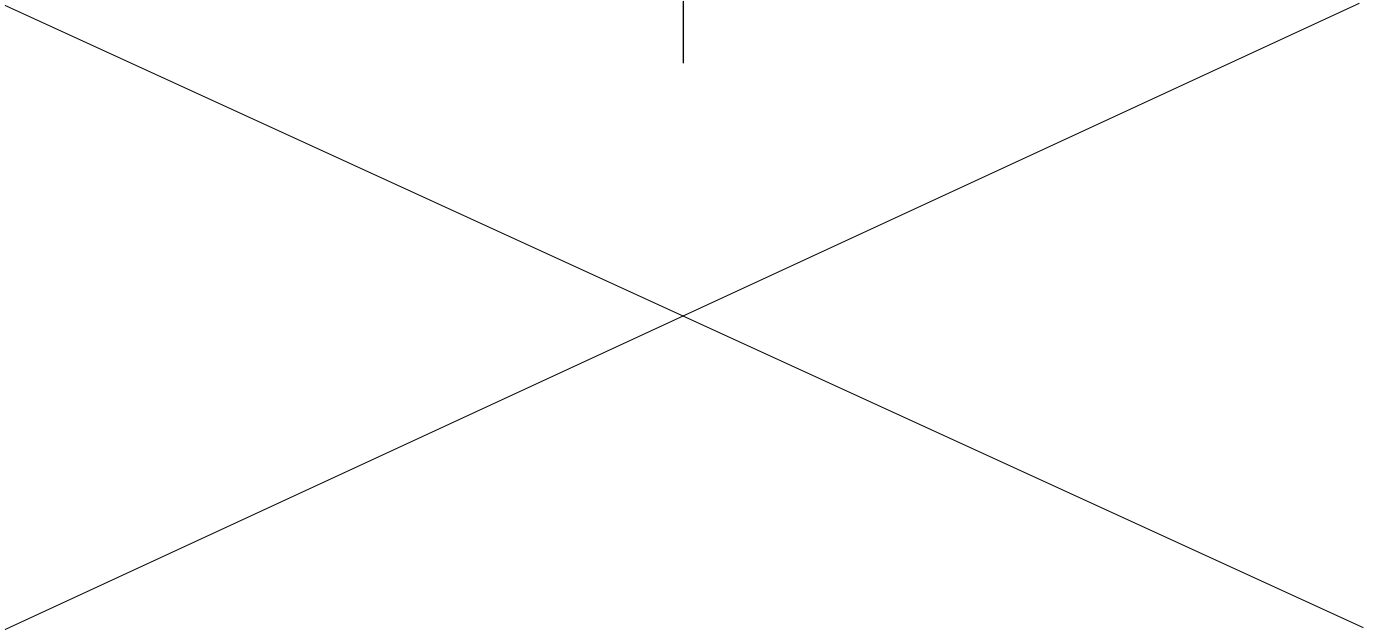
This Paper Consist of **TWO** Parts.

- **SECTION I-FAULT TRACING**
- **SECTION II- REPAIRS AND MEASUREMENT**

You are advised to read carefully through the Question Paper, before you begin your answers.

You are reminded of the necessity for good English and orderly presentation in your answers.

Turn Over

**FAULT TRACING WRITTEN SECTION (5marks)**

1- Draw a simple three pin relay in its open position.

(2marks)

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2- Give the function of the overrunning clutch of a starter motor.

(1mark)

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3- What do you understand by ignition timing?

(1mark)

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4- List one effects of wrong ignition timing

(1mark)

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FAULT TRACING FORM

| NAME OF CIRCUIT OR COMPONENT | CHECKS | INSTRUMENT(S) USED | VALUES | | POSSIBLE FAULTS | REMEDIES |
|---------------------------------|--------|-----------------------|--------|-------|-----------------|----------|
| | | | GIVEN | FOUND | | |
| | | | | | | |

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TABLE 1: REPAIRS

| Nº phase | Phase | Nº operation | Operation | Duration of operation | Technical information (and diagram) | Tools | Conclusion |
|---------------------|--------------|-------------------------|------------------|----------------------------------|--|--------------|-------------------|
| | | | | | | | |

TABLE 2: MEASUREMENTS

| NAME OF ORGAN | CHECKS | MEANS USED | VALUES | | APPRECIATION | | CONCLUSION |
|--------------------------|---------------|-------------------|---------------|--------------|---------------------|------------|-------------------|
| | | | GIVEN | FOUND | GOOD | BAD | |
| | | | | | | | |

CONCLUSION

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Written Questions Repairs and measurement**(05 marks)***Answer all questions in the spaces provided*

1. Give one safety precautions to be observed when charging the battery.

(1mark)

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2. What device or circuit is used to protect the starter motor from damage if the wiper blades are stock on the windshield

(1mark)

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3. State ONE advantage of using relays in the car wiring system

(1mark)

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4. Which instrument is used to measure the contact breaker gap.

(1mark)

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5. Why do we adjust the head lamp beams?

(1mark)

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.....

EVALUATION PAGE

| SECTION 1: FAULT TRACING | | | | |
|---|--|------------------|--------------|----------------|
| S/N | Item | Max. Mark | Score | Remarks |
| 1 | Out fit | 02 | | |
| 2 | Procedure | 04 | | |
| 3 | Faults traced | 06 | | |
| 4 | Proper use of instruments | 06 | | |
| 5 | Corrective action taken | 06 | | |
| 6 | Answers to oral questions | 03 | | |
| 7 | Respect of time | 03 | | |
| 8 | Answers to Written Questions | 05 | | |
| 9 | Filling of Fault Tracing Form | 05 | | |
| PART 1 TOTAL | | 40 | | |
| SECTION II: REPAIRS AND MEASUREMENTS | | | | |
| REPAIRS | | | | |
| 1 | Dismounting | 02 | | |
| 2 | Dismantling | 02 | | |
| 3 | Faults identified | 03 | | |
| 4 | Choice and mastery of tools | 02 | | |
| 5 | Pertinence of checks and adjustments carried out | 03 | | |
| 6 | Results obtained | 06 | | |
| 7 | Remounting | 04 | | |
| 8 | Respect of time given | 04 | | |
| 9 | Testing | 06 | | |
| 10 | Answers to Oral Questions | 03 | | |
| 11 | Filling of the Repair form | 05 | | |
| SECTION II TOTAL | | 40 | | |
| MEASUREMENTS | | | | |
| 1 | Preparation of the work post | 01 | | |
| 2 | Use of apparatus | 01 | | |
| 3 | Pertinence of the measurement | 02 | | |
| 4 | Result obtained | 02 | | |
| 5 | Respect of time given | 01 | | |
| 6 | Testing | 02 | | |
| 7 | Answers to Oral Questions | 02 | | |

| | | | | |
|---------------------------|------------------------------|------------|--|--|
| 8 | Filling of Measurement Form | 04 | | |
| 9 | Answers to Written Questions | 05 | | |
| MEASUREMENTS TOTAL | | 20 | | |
| SECTION II TOTAL | | 60 | | |
| TOTAL | | 100 | | |