

AUTO PARTS MERCHANDISING

SCHEME OF EXAMINATION

There will be two papers, Paper 1 and 2, both of which will be a composite paper to be taken at a sitting.

PAPER 1: Will consist of forty multiple choice questions all of which must be taken in 50 minutes for 40 marks.

PAPER 2: Will consists of two sections, Sections A and B. Both sections will last _____ for 2 hours and carry 100 marks.

Section A: Will consist of three questions including a compulsory one and drawn on the technical part of the syllabus. Candidates will be required to answer two questions, including the compulsory one. The section will carry 40 marks.

Section B: Will consist of four questions based on the merchandising part of the syllabus. Candidates will be required to answer three of the questions for 60 marks.

DETAILED SYLLABUS

S/N	SECTIONS	CONTENTS	NOTES
			<ul style="list-style-type: none">● SAFETY IN AUTO PARTS MERCHANDISING SHOP: ● Definition of safety.● Safety clothing (helmet, goggle, hand glove, nose mask, foot boot, over all dress)● Fire extinguisher: types of extinguishers● Causes and prevention of accident ● ENGINE PARTS: ● Identification of parts, examples Piston, Piston rings, Connecting rod, Camshaft, Crankshaft, Valves, Cylinder head and Oil pump.● Sketching of Engine parts as listed above.

1.

- **AUTOMOBILE PARTS**

- Location and functions of engine parts.
- **TRANSMISSION SYSTEM(CLUTCH):**
- Identification of parts of a clutch.(flywheel, clutch plate, pressure plate assembly and release bearing)
- Functions of the clutch parts.
- **TRANSMISSION SYSTEM (GEAR BOX):**
- Types of gear box:
 - (manual – 3, 4 & 5 speeds and automatic transmission)
- Functions of gear box.
- **TRANSMISSION SYSTEM (PROPELLER SHAFT AND REAR AXLE ASSEMBLY):**
- Types of propeller shafts and universal/sliding joints.
- Functions of the transmission system parts.
- Identification of parts of axle assembly.
- **SUSPENSION SYSTEM:**
- Types. (Normal beam and independent suspension system.)
- Parts of suspension system-Damper, spring

TECHNICAL SECTION

(coil springs, torsion bar, leaf spring)

- Functions of the parts.

- **COOLING SYSTEM:**

- Types.(water and air cooling system)
- Functions of the cooling system.
- Parts of water and air cooling systems.(Radiators, fan blade, fan belt, water pump, water host and thermostat).

- **STEERING SYSTEM:**

- Types. (Manual and power assisted steering.)
- Parts of a steering (steering gearboxes, steering wheel, steering shaft and tie-rod.
- Functions of the parts.

- **BRAKING SYSTEM:**

- Types. (Disc and drum)
- Parts. (master cylinder, wheel cylinder, connecting pipe, brake pads, brake shoes/ lining)
- Functions of the parts.

- **LUBRICATION SYSTEM:**

- Parts. (Oil tank/sump, Oil filter, Oil cooler, Oil seal, Pressure switch and Oil pump & types
- Types of lubricant (Oil and grease)
- Types of Oil (SAE40, SAE60 and SAE 30/20w)
- Quality and uses of oil and grease.

- **ELECTRICAL PARTS:**

- **TOOL, TEST EQUIPMENT AND ACCESSORIES**

- Components (Battery, fuse, electrical control unit/brain box, alternator, ignition, coil, bulb, and cut-out)
- Identification of the components.
- Functions of the component.
- **WHEELS AND TYRES:**
 - Types of wheel (Spoke wheel, alloyed wheel and pressed steel wheel)
 - Types of tyres (tube and tubeless)
 - Sizes of wheel and tyre.
 - Functions of wheel and tyre.
- **TYPES OF TOOLS AND THEIR USES:**
 - General tools (Spanner, harmer, mallet, allen key, screw driver, and plier)
 - Special tools (Extractor, pullers, Sledge hammer, and lifters)
 - Differences between general and special tools
- **CARE OF TOOLS**
 - Ways/means of caring for tools e.g.(greasing, cleaning and packing,)
 - Effects of improper tools care
- **TEST EQUIPMENT**
 - Types (Spark plug cleaner, engine analyzer, dwell angle tester, Exhaust gas analyzer, and

			<ul style="list-style-type: none"> vacuum tester) ● Functions of different types of test equipment. ● MAINTENANCE OF TEST EQUIPMENT ● Knowledge of starting and stopping of the equipment. ● Importance/Uses of manufacturers' manuel. ● ACCESSORIES ● Definition. ● Importance. ● Care of accessories. ● Types (steering cover, car radio, wheel cover, seat cover and car cover)
		<p style="text-align: center;">● STORAGE CATALOGING</p>	<ul style="list-style-type: none"> ● STORAGE: ● Definition ● Process and ways of storing parts ● Reasons for proper storing of parts ● CATALOGUING: ● Definition. ● Functions ● Process of locating Auto parts using Catalogue. ● RE-ORDER QUANTITY ● Meaning ● Importance/Advantage of re-order quantity. ● The process of re-ordering auto- parts quantity /Stock ● Principle of maintaining parts/stock level and its importance.

2.

MERCHANDISING SECTION

• **STORAGE, CATALOGING AND VISUAL PRESENTATION**

- Calculations (Re-order level, FIFO and LIFO)
- **VISUAL PRESENTATION:**
- Methods of items presentation /grouping/arrangement of parts (by branding and manufacturers/models
- Advantages of item presentation.
- **INVENTORY:**
- Definition.
- Types(Daily, Periodic and annual)
- Procedure for inventory taking(use of bin card)
- **PRODUCT SOURCING:**
- Definition.
- Ways of sourcing products
- Importance.

- **SALES:**
- Definition.
- Types (Cash, Credit/ deferred sales)
- Method of selling (Personal, door-to-door, trade fairs, open market, unit shops.
- Explanation and procedure for sales calls
- **INVOICING:**
- Meaning.
- Contents.
- Uses/Importance.

- **SALES, INVOICING, FORECASTING, RECORD KEEPING,, FUND RAISING, MARKET ANALYSIS, ADVERTISING, VALUE PRICING AND CUSTOMER SERVICES.**

- **FORECASTING:**

- Definition.
- Need/Reasons for forecasting.
- Advantages of forecasting.

- **RECORD KEEPING:**

- Types of records. (sale journal, purchases journal, sales ledger, purchase ledger, invoice, receipt and cash book.)
- Process of keeping the records
- Uses of the various records.

- **FUND RAISING(SOURCE OF FINANCE):**

- Definition of fund raising.
- Types of fund.
- Source/ways of raising fund.
- The process/procedure of raising fund.

- **MARKET ANALYSIS:**

- Definition of market.
- Definition of market analysis.
- Definition of market segment.
- Explanation of Market segmentation.
- Procedure and basis for Market Segmentation.

- **VALUE PRICING:**

- Definition.
- Types.
- Application.

			<ul style="list-style-type: none"> ● ADVERTISING: ● Definition. ● Types. ● Media of advertising. ● Advantages. ● CUSTOMER SERVICE: ● Meaning ● Types ● Importance/advantages ● Handling of customers' complaints
		<p>(C) WARRANTY/ GUARANTY AND REGULATORY BODIES.</p>	<ul style="list-style-type: none"> ● WARRANTY/ GUARANTY: ● Meaning. ● Importance. ● Procedure for claiming warranty/guaranty right ● Process of losing warranty right ● REGULATORY BODIES: ● Reason for regulation. ● Quality control (Definition and types) ● Ways to improve quality. ● Examples of Regulatory Body. (Standard Organisation of Nigeria-SON, Consumer Protection Board and Society of Automobile Engineers – SAE) ● Functions.
			<ul style="list-style-type: none"> ● INTRDUCTION TO AUTO PARTS MERCHANDISING: ● Definition of

(D) ENTREPRENUERSHIP

- merchandising.
- Explanation of Auto parts merchandising.
- **PERSONAL QUALITIES OF A MERCHANDISER:**
- Qualities of an auto parts seller.
- **ETHICAL BUSINESS BEHAVIOUR:**
- Definition.
- Type
- Explanation of behavior expected of an Auto part seller.

RECOMMENDED TEXTBOOKS

- Technology For Motor Vehicle Mechanics, Parts 1, 2 &3. By Mudd, S.C.
- Motor Vehicle Technology and Practical Work. By Dolan, D. A.
- Principles of Marketing. By Philip Kotler.
- Marketing. By Giles, G.B. (The M&E Hand book)