

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
1.	TECHNICAL SECTION	(A) AUTOMOBILE PARTS	<p>(1) SAFETY IN AUTO PARTS MERCHANDISING SHOP:</p> <ul style="list-style-type: none"> i. Definition of safety. ii. Safety clothing (helmet, goggle, hand glove, nose mask, foot boot, over all dress) iii. Fire extinguisher: types of extinguishers iv. Causes and prevention of accident <p>(2) ENGINE PARTS:</p> <ul style="list-style-type: none"> i. Identification of parts,

			<p>examples Piston, Piston rings, Connecting rod, Camshaft, Crankshaft, Valves, Cylinder head and Oil pump.</p> <p>ii. Sketching of Engine parts as listed above.</p> <p>iii. Location and functions of engine parts.</p> <p>(3) TRANSMISSION SYSTEM(CLUTCH):</p> <p>i. Identification of parts of a clutch.(flywheel, clutch plate, pressure plate assembly and release bearing)</p> <p>ii. Functions of the clutch parts.</p> <p>(4) TRANSMISSION SYSTEM (GEAR BOX):</p> <p>i. Types of gear box: (manual – 3, 4 & 5 speeds and automatic transmission)</p> <p>ii. Functions of gear box.</p> <p>(5) TRANSMISSION SYSTEM (PROPELLER SHAFT AND REAR AXLE ASSEMBLY):</p> <p>i. Types of propeller shafts and universal/sliding joints.</p> <p>ii. Functions of the transmission system parts.</p> <p>iii. Identification of parts of axle</p>
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			<p>assembly.</p> <p>(6) SUSPENSION SYSTEM:</p> <ol style="list-style-type: none">i. Types. (Normal beam and independent suspension system.)ii. Parts of suspension system- Damper, spring (coil springs, torsion bar, leaf spring)iii. Functions of the parts. <p>(7) COOLING SYSTEM:</p> <ol style="list-style-type: none">i. Types.(water and air cooling system)ii. Functions of the cooling system.iii. Parts of water and air cooling systems.(Radiators, fan blade, fan belt, water pump, water host and thermostat). <p>(8) STEERING SYSTEM:</p> <ol style="list-style-type: none">i. Types. (Manual and power assisted steering.)ii. Parts of a steering (steering gearboxes, steering wheel, steering shaft and tie-rod.iii. Functions of the parts. <p>(9) BRAKING SYSTEM:</p> <ol style="list-style-type: none">i. Types. (Disc and drum)ii. Parts. (master cylinder, wheel cylinder, connecting
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		<p style="text-align: center;">(B) <u>TOOL, TEST</u> <u>EQUIPMENT AND</u> <u>ACCESSORIES</u></p>	<p>pipe, brake pads, brake shoes/ lining)</p> <p>iii. Functions of the parts.</p> <p>(10) LUBRICATION SYSTEM:</p> <p>i. Parts. (Oil tank/sump, Oil filter, Oil cooler, Oil seal, Pressure switch and Oil pump & types</p> <p>ii. Types of lubricant (Oil and grease)</p> <p>iii. Types of Oil (SAE40, SAE60 and SAE 30/20w)</p> <p>iv. Quality and uses of oil and grease.</p> <p>(11) ELECTRICAL PARTS:</p> <p>i. Components (Battery, fuse, electrical control unit/brain box, alternator, ignition, coil, bulb, and cut-out)</p> <p>ii. Identification of the components.</p> <p>iii. Functions of the component.</p> <p>(12) WHEELS AND TYRES:</p> <p>i. Types of wheel (Spoke wheel, alloyed wheel and pressed steel wheel)</p> <p>ii. Types of tyres (tube and tubeless)</p> <p>iii. Sizes of wheel and tyre.</p> <p>iv. Functions of wheel and tyre.</p>
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			<p>(1) TYPES OF TOOLS AND THEIR USES:</p> <ol style="list-style-type: none">i. General tools (Spanner, harmer, mallet, allen key, screw driver, and plier)ii. Special tools (Extractor, pullers, Sledge hammer, and lifters)iii. Differences between general and special tools <p>(2) CARE OF TOOLS</p> <ol style="list-style-type: none">i. Ways/means of caring for tools e.g.(greasing, cleaning and packing,)ii. Effects of improper tools care <p>(3) TEST EQUIPMENT</p> <ol style="list-style-type: none">i. Types (Spark plug cleaner, engine analyzer, dwell angle tester, Exhaust gas analyzer, and vacuum tester)ii. Functions of different types of test equipment. <p>(4) MAINTENANCE OF TEST EQUIPMENT</p> <ol style="list-style-type: none">i. Knowledge of starting and stopping of the equipment.ii. Importance/Uses of manufacturers' manuel. <p>(5) ACCESSORIES</p> <ol style="list-style-type: none">i. Definition.
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			<ul style="list-style-type: none"> ii. Importance. iii. Care of accessories. iv. Types (steering cover, car radio, wheel cover, seat cover and car cover)
2.	MERCHANDISING SECTION	(A) STORAGE, CATALOGING AND VISUAL PRESENTATION	<p>(1) STORAGE:</p> <ul style="list-style-type: none"> i. Definition ii. Process and ways of storing parts iii. Reasons for proper storing of parts <p>(2) CATALOGUING:</p> <ul style="list-style-type: none"> i. Definition. ii. Functions iii. Process of locating Auto parts using Catalogue. <p>(3) RE-ORDER QUANTITY</p> <ul style="list-style-type: none"> i. Meaning ii. Importance/Advantage of re-order quantity. iii. The process of re-ordering auto- parts quantity /Stock iv. Principle of maintaining parts/stock level and its importance. v. Calculations (Re-order level, FIFO and LIFO) <p>(4) VISUAL PRESENTATION:</p> <ul style="list-style-type: none"> i. Methods of items presentation /grouping/arrangement of

			<p>parts (by branding and manufacturers/models</p> <p>ii. Advantages of item presentation.</p> <p>(5) INVENTORY:</p> <p>i. Definition.</p> <p>ii. Types(Daily, Periodic and annual)</p> <p>iii. Procedure for inventory taking(use of bin card)</p> <p>(6) PRODUCT SOURCING:</p> <p>i. Definition.</p> <p>ii. Ways of sourcing products</p> <p>iii. Importance.</p>
		<p>(B) SALES, INVOICING, FORECASTING, RECORD KEEPING,, FUND RAISING, MARKET ANALYSIS, ADVERTISING, VALUE PRICING AND CUSTOMER SERVICES.</p>	<p>(1) SALES:</p> <p>i. Definition.</p> <p>ii. Types (Cash, Credit/ deferred sales)</p> <p>iii. Method of selling (Personal, door-to-door, trade fairs, open market, unit shops.</p> <p>iv. Explanation and procedure for sales calls</p> <p>(2) INVOICING:</p> <p>i. Meaning.</p> <p>ii. Contents.</p> <p>iii. Uses/Importance.</p> <p>(3) FORECASTING:</p> <p>i. Definition.</p> <p>ii. Need/Reasons for forecasting.</p>

			<p>iii. Advantages of forecasting.</p> <p>(4) RECORD KEEPING:</p> <p>i. Types of records. (sale journal, purchases journal, sales ledger, purchase ledger, invoice, receipt and cash book.)</p> <p>ii. Process of keeping the records</p> <p>iii. Uses of the various records.</p> <p>(5) FUND RAISING(SOURCE OF FINANCE):</p> <p>i. Definition of fund raising.</p> <p>ii. Types of fund.</p> <p>iii. Source/ways of raising fund.</p> <p>iv. The process/procedure of raising fund.</p> <p>(6) MARKET ANALYSIS:</p> <p>i. Definition of market.</p> <p>ii. Definition of market analysis.</p> <p>iii. Definition of market segment.</p> <p>iv. Explanation of Market segmentation.</p> <p>v. Procedure and basis for Market Segmentation.</p> <p>(7) VALUE PRICING:</p> <p>i. Definition.</p> <p>ii. Types.</p> <p>iii. Application.</p>
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			<p>(8) ADVERTISING:</p> <ol style="list-style-type: none"> i. Definition. ii. Types. iii. Media of advertising. iv. Advantages. <p>(9) CUSTOMER SERVICE:</p> <ol style="list-style-type: none"> i. Meaning ii. Types iii. Importance/advantages iv. Handling of customers' complaints
		<p>(C) WARRANTY/ GUARANTY AND REGULATORY BODIES.</p>	<p>(1) WARRANTY/ GUARANTY:</p> <ol style="list-style-type: none"> i. Meaning. ii. Importance. iii. Procedure for claiming warranty/guaranty right iv. Process of losing warranty right <p>(2) REGULATORY BODIES:</p> <ol style="list-style-type: none"> i. Reason for regulation. ii. Quality control (Definition and types) iii. Ways to improve quality. iv. Examples of Regulatory Body. (Standard Organisation of Nigeria-SON, Consumer Protection Board and Society of Automobile Engineers – SAE) v. Functions.

		(D) ENTREPRENUERSHIP	(1) INTRDUCTION TO AUTO PARTS MERCHANDISING: i. Definition of merchandising. ii. Explanation of Auto parts merchandising. (2) PERSONAL QUALITIES OF A MERCHANTISER: i. Qualities of an auto parts seller. (3) ETHICAL BUSINESS BEHAVIOUR: i. Definition. ii. Type iii. Explanation of behavior expected of an Auto part seller.
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RECOMMENDED TEXTBOOKS

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