**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**

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| **S/N** | **SECTIONS** | **CONTENTS** | **NOTES** |
| 1. | **TECHNICAL SECTION** | 1. **AUTOMOBILE PARTS**
2. **TOOL, TEST EQUIPMENT AND ACCESSORIES**
 | 1. **SAFETY IN AUTO PARTS MERCHANDISING SHOP:**
2. Definition of safety.
3. Safety clothing ( helmet, goggle, hand glove, nose mask, foot boot, over all dress)
4. Fire extinguisher: types of extinguishers
5. Causes and prevention of accident
6. **ENGINE PARTS:**
7. Identification of parts, examples Piston, Piston rings, Connecting rod, Camshaft, Crankshaft, Valves, Cylinder head and Oil pump.
8. Sketching of Engine parts as listed above.
9. Location and functions of engine parts.
10. **TRANSMISSION SYSTEM(CLUTCH):**
11. Identification of parts of a clutch.( flywheel, clutch plate, pressure plate assembly and release bearing)
12. Functions of the clutch parts.
13. **TRANSMISSION SYSTEM (GEAR BOX):**
14. Types of gear box:

 (manual – 3, 4 & 5 speeds and automatic transmission) 1. Functions of gear box.
2. **TRANSMISSION SYSTEM (PROPELLER SHAFT AND REAR AXLE ASSEMBLY):**
3. Types of propeller shafts and universal/sliding joints.
4. Functions of the transmission system parts.
5. Identification of parts of axle assembly.
6. **SUSPENSION SYSTEM:**
7. Types. (Normal beam and independent suspension system.)
8. Parts of suspension system-Damper, spring (coil springs, torsion bar, leaf spring)
9. Functions of the parts.
10. **COOLING SYSTEM:**
11. Types.( water and air cooling system)
12. Functions of the cooling system.
13. Parts of water and air cooling systems.( Radiators, fan blade, fan belt, water pump, water host and thermostat).
14. **STEERING SYSTEM:**
15. Types. (Manual and power assisted steering.)
16. Parts of a steering (steering gearboxes, steering wheel, steering shaft and tie-rod.
17. Functions of the parts.
18. **BRAKING SYSTEM:**
19. Types. (Disc and drum)
20. Parts. ( master cylinder, wheel cylinder, connecting pipe, brake pads, brake shoes/ lining)
21. Functions of the parts.
22. **LUBRICATION SYSTEM:**
23. Parts. ( Oil tank/sump, Oil filter, Oil cooler, Oil seal, Pressure switch and Oil pump & types
24. Types of lubricant (Oil and grease)
25. Types of Oil (SAE40, SAE60 and SAE 30/20w)
26. Quality and uses of oil and grease.
27. **ELECTRICAL PARTS:**
28. Components ( Battery, fuse, electrical control unit/brain box, alternator, ignition, coil, bulb, and cut-out)
29. Identification of the components.
30. Functions of the component.
31. **WHEELS AND TYRES:**
32. Types of wheel ( Spoke wheel, alloyed wheel and pressed steel wheel)
33. Types of tyres (tube and tubeless)
34. Sizes of wheel and tyre.
35. Functions of wheel and tyre.
36. TYPES OF TOOLS AND THEIR USES:
37. General tools (Spanner, harmer, mallet, allen key, screw driver, and plier)
38. Special tools (Extractor, pullers, Sledge hammer, and lifters)
39. Differences between general and special tools
40. CARE OF TOOLS
41. Ways/means of caring for tools e.g.(greasing, cleaning and packing,)
42. Effects of improper tools care
43. TEST EQUIPMENT
44. Types (Spark plug cleaner, engine analyzer, dwell angle tester, Exhaust gas analyzer, and vacuum tester)
45. Functions of different types of test equipment.
46. MAINTENANCE OF TEST EQUIPMENT
47. Knowledge of starting and stopping of the equipment.
48. Importance/Uses of manufacturers’ manuel.
49. ACCESSORIES
50. Definition.
51. Importance.
52. Care of accessories.
53. Types ( steering cover, car radio, wheel cover, seat cover and car cover)
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| **2.** | **MERCHANDISING SECTION** | 1. **STORAGE, CATALOGING AND VISUAL PRESENTATION**
 | 1. **STORAGE:**
2. Definition
3. Process and ways of storing parts
4. Reasons for proper storing of parts
5. **CATALOGUING:**
6. Definition.
7. Functions
8. Process of locating Auto parts using Catalogue.
9. **RE-ORDER QUANTITY**
10. Meaning
11. Importance/Advantage of re-order quantity.
12. The process of re-ordering auto- parts quantity /Stock
13. Principle of maintaining parts/stock level and its importance.
14. Calculations (Re-order level, FIFO and LIFO)
15. **VISUAL PRESENTATION:**
16. Methods of items presentation /grouping/arrangement of parts ( by branding and manufacturers/models
17. Advantages of item presentation.
18. **INVENTORY:**
19. Definition.
20. Types( Daily, Periodic and annual)
21. Procedure for inventory taking( use of bin card)
22. **PRODUCT SOURCING:**
23. Definition.
24. Ways of sourcing products
25. Importance.
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|  |  | 1. **SALES, INVOICING, FORCASTING, RECORD KEEPING,, FUND RAISING, MARKET ANALYSIS, ADVERTISING, VALUE PRICING AND CUSTOMER SERVICES.**
 | 1. **SALES:**
2. Definition.
3. Types ( Cash, Credit/ deferred sales)
4. Method of selling (Personal, door-to-door, trade fairs, open market, unit shops.
5. Explanation and procedure for sales calls
6. **INVOICING:**
7. Meaning.
8. Contents.
9. Uses/Importance.
10. **FORECASTING:**
11. Definition.
12. Need/Reasons for forecasting.
13. Advantages of forecasting.
14. **RECORD KEEPING:**
15. Types of records. (sale journal, purchases journal, sales ledger, purchase ledger, invoice, receipt and cash book.)
16. Process of keeping the records
17. Uses of the various records.
18. **FUND RAISING(SOURCE OF FINANCE):**
19. Definition of fund raising.
20. Types of fund.
21. Source/ways of raising fund.
22. The process/procedure of raising fund.
23. **MARKET ANALYSIS:**
24. Definition of market.
25. Definition of market analysis.
26. Definition of market segment.
27. Explanation of Market segmentation.
28. Procedure and basis for Market Segmentation.
29. **VALUE PRICING:**
30. Definition.
31. Types.
32. Application.
33. **ADVERTISING:**
34. Definition.
35. Types.
36. Media of advertising.
37. Advantages.
38. **CUSTOMER SERVICE:**
39. Meaning
40. Types
41. Importance/advantages
42. Handling of customers’ complaints
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|  |  | ( C ) **WARRANTY/ GUARANTY AND REGULATORY BODIES.** | 1. **WARRANTY/ GUARANTY:**
2. Meaning.
3. Importance.
4. Procedure for claiming warranty/guaranty right
5. Process of losing warranty right
6. **REGULATORY BODIES:**
7. Reason for regulation.
8. Quality control ( Definition and types)
9. Ways to improve quality.
10. Examples of Regulatory Body. (Standard Organisation of Nigeria- SON, Consumer Protection Board and Society of Automobile Engineers – SAE)
11. Functions.
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|  |  | **( D) ENTREPRENUERSHIP** | 1. **INTRDUCTION TO AUTO PARTS MERCHANDISING:**
2. Definition of merchandising.
3. Explanation of Auto parts merchandising.
4. **PERSONAL QUALITIES OF A MERCHANDISER:**
5. Qualities of an auto parts seller.
6. **ETHICAL BUSINESS BEHAVIOUR:**
7. Definition.
8. Type
9. 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)