MODULE -3

AUTOMOBILE ENGINEERING

*1. What are various types of Braking systems?*

*2. What are the requirements of a good braking system?*

*3. Write a short note on Drum brakes.*

*4. Write a short note on Disc Brakes.*

*5. Write the working of Hydraulic Brakes with well labelled diagram.*

*6. What is the function of Master cylinder?*

*7. Write a short note on Air Brake.*

*8. Write a short note on Air assisted Hydraulic brakes with well labelled diagrams.*

*9. Explain Vacuum brakes with well labelled diagram.*

*10. What are the advantages and disadvantages of Vacuum brakes?*

MODULE -4

AUTOMOBILE ENGINEERING

1. Show with a well labelled diagram, the horn circuit.
2. What are the functions of Spark Plug?
3. Write the main components of a Spark Plug?
4. Write a short note on construction and working of a Spark Plug?
5. What are the possible causes of Spark plug failure?
6. What are the common Ignition problems? Write their remedies.
7. Show a well labelled diagram for a Cut-out circuit?
8. Show a well labelled diagram for Lighting circuit?

MODULE -5

AUTOMOBILE ENGINEERING

1. *Define suspension system.*
2. *Describe the various components of suspension system with its functions briefly.*
3. *What are the functions of suspension system?*
4. *What are the effects of unsprung weight?*
5. *What are the requirements of suspension system?*
6. *How sprung am/unsprung weights are defined? Write down the relation between sprung and unsprung weights.*
7. *What are different types of spring system used in suspension of automobiles?*
8. *Write down the characteristics of coil spring.*
9. *What is meant by torsion bar?*
10. *State the advantages of a torsion bar.*
11. *What are the advantages of independent suspension system.*
12. *What are the advantages of front wheel independent suspension?*
13. *What are the disadvantages of Wishbone type suspension?*
14. *What are the purposes of shock absorbers?*
15. *Mention the advantages of telescopic shock absorber.*
16. *What are the causes and remedies of improper tyre wear?*
17. *Write down any two differences between springs and shock absorbers with respect*

*to its functions.*

MODULE -6

AUTOMOBILE ENGINEERING

1. **Write the functions of Lubricating System in IC Engines?**
2. **What are the various components of Lubricating System?**
3. **Write a short note on Splash Type Oil lubrication?**
4. **Write a short note on Force fed Type Oil Lubricating System?**
5. **Write a short note on Splash-Force Fed Type Oil lubrication**
6. **What are the problems encountered with Lubricating systems**
7. **Write the functions of Cooling System in IC Engines?**
8. **What do you mean by Full fed Lubricating system?**
9. **What are the various cooling defects and their remedies?**
10. **What are the methods of cooling of an IC engine?**
11. Why is cooling necessary for IC engine?
12. Explain in brief the methods of cooling of IC engine.
13. Differentiate between air cooling system and water cooling system.
14. What is the purpose of the fins in an air-cooled system?

MODULE -7

AUTOMOBILE ENGINEERING

*1. What are the factors that affect fuel vaporization?*

*2. What is meant by carburetion?*

*3. List out the major drawbacks of using carburettor in multi cylinder engines.*

*4. What are the functions of carburettor?*

*5. State the two basic reasons for defects in a carburettor.*

*6. What are the limitations of carburettor?*

*7. State the advantages and disadvantages of battery ignition system.*

*8. Explain CRDI system with well labelled diagram.*

*9. Explain Multi-point Fuel Injection System with well labelled diagram.*

*10. What are the advantages and disadvantages of Common Rail Direct Injection system?*

*11. What are the advantages and disadvantages of Multi-Point Fuel Injection system?*

REFERENCE BOOKS:

1. R.B. Gupta
2. Kirpal Singh
3. R.K. Rajput