

CODE NO: RR 212401

**2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY**

**II B.TECH I SEMESTER REGULAR EXAMINATIONS**

**AUTOMOBILE ENGINEERING DRAWING  
(AUTOMOBILE ENGINEERING)**

NOVE 2006

TIME:3 HOUR  
MARK:80

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**ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS**

1. (a) What are the general classes of combustion engines and how do they differ from in principle.  
(b) Discuss the relative merits and demerits of internal combustion engines and external combustion engines.
2. (a) What is scavengng ? Explain its working principle in two stroke engine with suitable diagrams ?  
(b) Explain the advantages and limitation of four stroke I.C. engine over two stroke explain.
3. (a) Differentiate between a dry timer and wet timer?  
(b) What is piston clearance? Why is it necessary?  
(c) What quality a piston must possess?
4. (a) How to minimize the leakage of gases from the engine cylinder through the valve ports while valves are closed ? Explain  
(b) Draw the diagram of crank case ? What are different components accommodated in crank case ?
5. (a) What is meant by carburetor?  
(b) Sketch a typical inductor system of a petrol engine.  
(c) What are the factors which affect the process of carburetor?
6. (a) Classify different fuel delivery systems for petrol engine ? Explain.  
(b) What are different problems faced by fuel transfer pump ? explain methods to rectify them
7. (a) Describe the requirements of an ideal injection  
(b) Describe with the help of suitable sketches
  - i. Distubutor system
  - ii. Common rail system
  - iii. Jet-pump system
8. (a) . Discuss the functions of lubrication in an engine?  
(b) Explain the properties of the lubricator oil in detail?