

SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

DEPARTMENT OF AUTOMOBILE ENGINEERING

VISION

"To develop technically skilled engineers with value-based education in automotive industry to face upcoming chances".

MISSION

- Understanding the need for regional automotive industries.
- Provide hands on skills for life long professional development.
- To create responsible students with sense of ethics & discipline.

Subject Name: TTW(22559)

Assignment No 1 CO NO:CO504.1

Questions.

- 1. Describe constructional details of single cradle frame with neat sketch.
- 2. List materials used for two wheeler frame.
- 3. State types of two wheeler frames.
- 4. Sketch Single Cradle Frame.
- 5. Describe constructional details of Double Cradle Frame with neat sketch.
- 6. Select frame material for KTM bike and justify its use.

Course coordinator: - Mr. Mayuresh Naikawade



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Subject Name: TTW(22559)

Assignment No 2 CO NO:CO504.2

Questions.

- 1. State any two types of mufflers with their application.
- 2. Describe procedure to adjust valve clearance of four stroke engine of two wheeler with necessary sketches.
- 3. Describe push rod overhead valve operating mechanism with neat sketch.
- 4. State the function of Air Cleaner & Carburettor.
- 5. Explain with sketch working of electronic petrol injection system. State its advantages over carburetted fuel system.
- 6. State the lubrication system used for two wheeler four-stroke engine and explain working with neat sketch.
- 7. Describe the diagnosis procedure of exhaust gas analysis.
- 8. Explain with relevant justification that use of catalytic convertor reduce the tail pipe emissions.

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Assignment No 3 CO NO:CO504.3

Questions.

- 1. Draw transmission system layout of two wheeler.
- 2. Describe mono shock regular swing arm suspension system with neat sketch.
- 3. State any two function of Suspension System of two wheeler.
- 4. Define Caster angle and Trail.
- 5. Explain working of foot operated gear shifting mechanism of two wheelers.
- 6. Describe the working of constant mesh gear box.
- 7. Explain the effect of steering geometry on vehicle performance with sketches.

Course coordinator: - Mr. Mayuresh Naikawade



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Assignment No 4 CO NO:CO504.4

Questions.

- 1. Describe working of capacitive discharge ignition (CDI) system.
- 2. Describe working of microprocessor controlled ignition system with neat sketch.
- 3. Distinguish between kick start and button start arrangement on the basis of effort, battery, convenience and maintenance.
- 4. Describe the working of two wheeler charging system with neat sketch.
- 5. "Indicator lamps play an important role in vehicle safety" justify this statement with suitable illustrations.

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Subject Name: TTW(22559)

Assignment No 5 CO NO:CO504.5

Questions.

- 1. State the importance of I) Carsh bar II) Saree guard III) Jacket IV) Helmet.
- 2. "Ergonomics plays an important role in passenger comfort" Justify this statement with illustrations.
- 3. "Driving habits are closely associated with driver's safety" Justify this statement with illustrations.
- 4. Describe effects of frontal area exposed in motor cycle on performance of vehicle.
- 5. Describe the Ergonomic aspects of Handle bar position.
- 6. Ergonomics plays an important role in passenger comfort. Justify this statement with illustrations.
- 7. Explain significance of aesthetic aspect for side panels of scooter.
- 8. Explain the Aesthetic Aspects of : Ground Clearance, Mud Guard Shape and Position.

Course coordinator: - Mr. Mayuresh Naikawade