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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII EXAMINATION - WINTER 2015

| | • | Code: 170206 Date:04/12/2015 Name: Two Wheeler and Three Wheeler Technology | |
|-----|------------|---|----------|
| Tir | ne: 1 | 0:30am to 1:00pm Total Marks: 70 | |
| | 2. | Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. | |
| Q.1 | (a) (b) | Classify two wheeler in details with example of each. Explain with neat sketch magneto ignition system and discuss its merits and demerits. | 07 07 |
| Q.2 | (a) (b) | What is the function of air fins? How their spacing and height are designed? Discuss the principle operation of clutch and explain centrifugal clutch with neat sketch. | 07 07 |
| | (b) | OR Explain with neat sketch constant mesh gear box. | 07 |
| Q.3 | (a) (b) | Discuss the different handle bar used in two wheeler in detail. Which are the dynamic and kinematic requirements for suspension system? OR | 07 07 |
| Q.3 | (a) (b) | With the help of neat sketch working differential of three wheeler. Discuss sprung and unsprung mass ratio in detail. | 07 07 |
| Q.4 | (a) | Classify the brakes in detail. Explain with neat sketch drum brake used for two wheeler. | 07 |
| | (b) | Discuss the tyre requirements for two and three wheelers. OR | 07 |
| Q.4 | (a) | Discuss the lubrication system used in two stroke petrol engine with neat sketch. | 07 |
| | (b) | Classify various types of frames used in two wheelers. Explain back bone type of frame with neat sketch. | 07 |
| Q.5 | (a) (b) | Discuss the single and double caliper disc brakes in two wheelers. Explain roll, pitch and yaw movement of vehicle. OR | 07 07 |
| Q.5 | (a) (b) | Discuss the routine and preventive maintenance of two wheeler. Describe with neat sketch working of electric horn of two wheelers. | 07 07 |
