

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2018****Subject Code: 2170207****Date: 19/11/2018****Subject Name: Two and Three Wheeler Technology****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

| | | MARKS |
|------------|---|-----------|
| Q.1 | (a) Classify two wheelers in detail. | 03 |
| | (b) Discuss the lubrication system used for two stroke engine in detail. | 04 |
| | (c) With the help of neat sketch explain the working of centrifugal clutch. | 07 |
| Q.2 | (a) Define scavenging? Enlist various scavenging processes. | 03 |
| | (b) Write down merits and demerits of shaft drive over chain drive. | 04 |
| | (c) Discuss various road resistance offered by vehicle while in motion. | 07 |
| | OR | |
| | (c) Explain the working of continuous variable transmission. | 07 |
| Q.3 | (a) What is the importance of side car in two wheeler? | 03 |
| | (b) Explain the battery starting system used in two wheelers. | 04 |
| | (c) Explain the working of differential in three wheelers with sketch. | 07 |
| | OR | |
| Q.3 | (a) Why single plate clutch is not used in two wheelers? | 03 |
| | (b) Discuss the various design consideration in two wheelers. | 04 |
| | (c) With help of neat sketch discuss the working of kick mechanism for two wheeler. | 07 |
| Q.4 | (a) Discuss the various methods of lubrication used for two wheelers in brief. | 03 |
| | (b) Explain magneto ignition system with neat sketch. | 04 |
| | (c) With the help of neat sketch explain the working of two stroke engine. | 07 |
| | OR | |
| Q.4 | (a) Compare battery ignition system with magneto ignition system with each other. | 03 |
| | (b) Compare two stroke engine with four stroke engine. | 04 |
| | (c) Differentiate between sports bike, cruiser bike and street bike. | 07 |
| Q.5 | (a) Enlist the various factors which affect the two wheelers stability. | 03 |
| | (b) Explain the working of belt drive in two wheeler. | 04 |
| | (c) Discuss various steering bars used for two wheeler in detail. | 07 |
| | OR | |
| Q.5 | (a) Compare disc brakes with drum brakes. | 03 |
| | (b) Draw the trouble shooting chart for any two wheeler. | 04 |
| | (c) With the help of neat sketch explain the working of drum brake used for two wheelers. | 07 |
