

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2182601/2182607****Date:15/05/2019****Subject Name:Tyre & Tube 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.

- Q. 1** (a) List out the different components of Tyre. (03)
(b) Write the disadvantages of Rib and Lug tread pattern. (04)
(c) Explain the different raw materials used in manufacturing of tyre. (07)
- Q. 2** (a) Draw the cross section of tyre. (03)
(b) Write the importance of crown angle in bias tyre design (04)
(c) Describe the tyre building method for radial tyre. (07)
- OR**
- Q. 2** (c) Discuss in detail about tyre noise, rolling resistance, aquaplaning. (07)
- Q. 3** (a) Write the basic application of Tyre. (03)
(b) Give the advantages and disadvantages of aspect ratio. (04)
(c) List out fabric treatment system and explain any one in detail. (07)
- OR**
- Q. 3** (a) Write the importance of Lubing Process. (03)
(b) Why we are giving Post curing Inflation in tyre? (04)
(c) List out the mould cleaning process and explain any one in detail. (07)
- Q. 4** (a) "Radial tube is only used in radial tyre" justify the statement. (03)
(b) Give the importance of Splicing process in automobile tube. (04)
(c) Explain the different test done on Automobile tube in detail. (07)
- OR**
- Q. 4** (a) List out the different defects of automobile Flap. (03)
(b) Write the importance of molding process of Automobile Flap. (04)
(c) Explain in detail about compounding and manufacturing process of Flap. (07)
- Q. 5** (a) List out the raw materials used in solid tyre manufacturing. (03)
(b) What is meant by 18"x7.8"x6" and 27"x21"x5" in solid tyre? (04)
(c) Short note on Hot and cold retreading. (07)
- OR**
- Q. 5** (a) Write the disadvantages of solid tyre over pneumatic tyre. (03)
(b) List out the different manufacturing of cycle tube and explain any one in brief. (04)
(c) Explain in detail about the manufacturing process of Solid tyre. (07)
