

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Automobile Engg.) (Sem.-6)

**AUTOMATION TRANSMISSION**

Subject Code : BTAE-602-18

M.Code : 79286

Date of Examination : 05-07-22

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Write briefly :**

- a) Define tractive effort.
- b) What is drawbar pull of a vehicle?
- c) Why electrical drives are preferred over hydraulic drive?
- d) Write advantages of cone clutch.
- e) What is meant by dual clutch transmission?
- f) What is compound gear train?
- g) Write applications of fluid coupling.
- h) What is the function of stator in torque converter?
- i) Write limitations of hydrostatic drive.
- j) What do you mean by sequential shifting?

## SECTION-B

2. List the advantages and disadvantages of torque converter.
3. Discuss the requirements of transmission system.
4. Differentiate between constant mesh and sliding mesh gear box.
5. What is shift shock? How it can be eliminated?
6. What are the four basic configurations of hydrostatic operation?

## SECTION-C

7. Describe a fully centrifugal clutch with the help of a neat sketch.
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  - a) With the help of diagram, explain the construction and working of ball and plunger type gear shift mechanism.
  - b) Discuss the principle of operation of a fine element torque converter used in '*Turbo glide*' transmission.
9. Discuss the principle of operation and construction of a fluid coupling.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**