No. of Printed Pages: 02 Roll No.

G122

B. Tech. EXAMINATION, 2020

(Seventh Semester)

(B Scheme) (Main & Re-appear)

(BT)

BT403B

DRUG AND VACCINE DEVELOPMENT

Time: 2½ Hours] [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Four* questions in all. All questions carry equal marks.

(3)M-G122

- **1.** Discuss in detail the regulatory aspects of therapeutic proteins as drugs.
- **2.** Describe the detailed procedure of engineering of human growth hormone and enlist the application of same.
- **3.** Discuss in detail the production of monoclonal antibodies and their application.
- **4.** Explain the various approaches for producing HIV therapeutic agents.
- **5.** Describe the immune response of host against viral and bacterial diseases.
- **6.** Explain the concept of autoimmunity. Also enumerate the causative factors for autoimmune diseases.
- 7. Elaborate the important types of vaccines currently in use.
- **8.** Discuss commercial and regulatory aspects of vaccine production and distribution.