

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Ph. - SEMESTER-VI • EXAMINATION – WINTER -2020****Subject Code:BP603TP****Date:07/01/2021****Subject Name: HERBAL DRUG TECHNOLOGY****Time: 02:00PM TO 04:00PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1** (a) What is *churna*? Describe in detail method of preparation of *churna*. Describe general procedure for standardization of *churna* as per Ayurvedic Pharmacopoeia of India. Describe advantages and disadvantages of *churna* as a formulation. **06**
- (b) Discuss history of herbs as source of drugs and drug discovery. **05**
- (c) Discuss the different methods used for the pest control. Write essential of a good pesticides. **05**
- Q.2** (a) What is *Bhasma*? Describe in detail method of preparation of *Bhasma*. Describe quality control parameters for *Bhasma*. In which condition *Bhasma* is required to be prescribed? **06**
- (b) What is *gutika*? Discuss standardization parameters of the same. **05**
- (c) Name different traditional systems of medicine. Describe holistic concept of drug administration in these systems. **05**
- Q.3** (a) Name different herbs and their active constitute which are useful as hepatoprotective or hypolipidemic. **06**
- (b) Define and classify the Nutraceuticals. **05**
- (c) Discuss the drug –food interaction with suitable examples. **05**
- Q.4** (a) Define and classify the herbal cosmetics. Write in details pharmacognosy of any two plants used for skin cosmetics. **06**
- (b) Enlist various cosmetics for hairs. Explain about herbal shampoos in detail. **05**
- (c) Enlist various herbal excipients and describe in detail about flavours and perfumes. **05**
- Q.5** (a) Enlist various herbal formulations available in market and explain in detail about herbal syrup. **06**
- (b) Elaborate on ICH guidelines for safety monitoring of natural products. **05**
- (c) Enlist various government institutions / industries involved in work of medicinal plants in India and write a note on any five Government institutions / industries. **05**
- Q. 6** (a) Write a note on WHO guidelines in quality assignment of herbal drugs. **06**
- (b) Discuss about requirement of infrastructure, staff and equipments for herbal drug industry. **05**
- (c) Write a note on patenting aspects of Traditional Knowledge and Natural Products with reference to turmeric. **05**
- Q.7** (a) Define the term – Patent, Bio prospecting and Bio piracy **06**
- OR**
- (a) Give the detailed note on plant sweetening agents. **06**
- OR**
- (a) Explain in detail about herbal phytosomes. **06**