	Reg. No. :	
Question Paper Code: 99D71		
B.E. / B.Tech. DEGREE EXAMINATION, MAY 2022		
Open Elective		
Civil Engineering		
19UBT971- Herbal Medicines		
(Common to CSE, EEE, ECE, MECH, IT, Chemical and Agriculture Engineering branches)		
(Regulation 2019)		
Dur	ration: Three hours Maximum: 1	00 Marks
Answer ALL Questions		
PART A - $(10 \text{ x } 2 = 20 \text{ Marks})$		
1.	Expand and define AYUSH.	CO1- U
2.	Write a short note on Shilajit.	CO1- U
3.	Write the lifetime of herbal gels and ointments and how it is prepared.	CO1- U
4.	Define Law of Similia.	CO1- U
5.	Classify Nutraceuticals depending upon their characteristics and major uses.	CO1- U
6.	What is the difference between functional foods and nutraceuticals?	CO1- U
7.	What are the effects of herb-drug interactions on various systems of a body?	CO2- App
8.	Write any two examples of Gums used in Cosmetics industry.	CO2- App
9.	Highlight the Powers of the Central and State Governments under the Protection of Plant Varieties and Farmers' Rights Act 2001	CO2- App
10.	Mention the ICH guidelines on herbal drug development.	CO2- App
	PART – B (5 x 16= 80 Marks)	
11.	(a) Outline and describe the Historical evolution of Herbal materials CO1- in India.	U (16)
	Or	

⁽b) Explain the importance of traditional Indian remedies and CO1-U (16) regional folklore in modern medicine.

12. (a) How can you relate the principles of Homeopathy System of CO4- E (16) Medicine is applied in diagnosis and treatment of diseases?

Or

- (b) What evidence would you suggest for Preparation and CO4-E (16) Standardization of Ayurvedic Herbal products?
- 13. (a) If you are a nutritionist working in a Clinic, what kind of CO4- E (16) nutraceuticals will you prescribe for a patient affected with brain cancer?

Or

- (b) If you are preparing an herbal formulation for preventing acne, CO5-I (16) what kind of raw materials would you recommend for glowing skin? Explain in detail.
- 14. (a) How would you show your understanding on adverse reactions CO3- Ana (16) ofbiodrugs and drug food interaction with appropriate examples.

Or

- (b) Describe the case studies on Ginseng and Ephedra, based on CO3- Ana (16) their possible side effects in drug interactions.
- 15 (a) Describe schedule Z of drug and cosmetics act for ASU drugs CO2- App (16)

Or

(b) Explain in detail about ICH guidelines for the evaluation and CO2- App (16) assessment of herbal drugs.