Seat No.: E	Inrolment No.
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Subject Code: 2280014

(c)

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm. - SEMESTER VIII · EXAMINATION – WINTER -2016

Date: 02/12/2016

05

Subject Name: Commerce of herbs and phytoconstituents					
Time: $02.30 \text{ pm} - 05.30 \text{ pm}$ Total 1			l Marks: 80		
Instru	ction	s:			
1.	 Attempt any five questions. Make suitable assumptions wherever necessary. 				
2.					
3.	3. Figures to the right indicate full marks.				
Q.1	(a)	How to isolate, identify and analyze the morphine and curcumin.		06	
	(b)	Give the WHO guidelines on good manufacturing practices for the manufacturer of herbal medicines.	;	05	

(c) Give the industrial contribution of liquorice and senna. 05 **Q.2** Write a short note on import export of the herbal drugs. (a) **06 (b)** What are license and registration procedure required for herbal drug industry in **05**

	(c)	India? Give a note on production, supply and distribution of medicinal plants.	05
Q.3	(a) (b) (c)	Give the detail Pharmacognosy of atropine and papain. What are the staff requirements for the herbal drug industry? Describe the modern quality control system for medicinal plants in herbal drug industry.	06 05 05
Q.4	(a) (b) (c)	Give a short note on worldwide trade of echinacea and withania. Write a note on industrially important medicinal plants. Give the industrial application of vinca alkaloids and artemisinin.	06 05 05
Q.5	(a) (b) (c)	Give the methods of standardization of herbal drugs. Explain in detail about types of herbal extracts of aromatic plants. Write a note on herbal wealth of India.	06 05 05
Q. 6	(a) (b) (c)	What are the constraints to the development of trade in herbal drug industry? Explain in detail about extraction of phytoconstituents from the herbal drugs. Describe patents and copyright of herbal drug.	
Q.7	(a) (b)	Give the WHO guidelines on good agriculture and collection practices for medicinal plants. Explain in brief about trade of aloe and ipecac.	06 05

Write a note on cultivation and collection of medicinal plants.