

# GUJARAT AYURVED UNIVERSITY

JAMNAGAR

M.Sc. Medical Plants FIRST Year Annual Examination - August 2017

**BOTANY**

DATE:- 01-08-2017  
Tuesday

TIME 10:00 A.M. TO 1:00 P.M.  
Max. Marks :- 100

---

- Instruction : 1. All questions carry equal marks  
2. Attempt any five questions.

1 Nymphaeaceae – Brassicaceae  
Disciflorae \_ Calyciflorae

2 Give a complete classification of Bentham and Hooker up to orders with merits and demerits.

3 Give short notes on following with suitable examples (any five)

- |                     |                                 |
|---------------------|---------------------------------|
| (A) Rhizome         | (D) Floral Part of Daru Haridra |
| (B) Catkin          | (E) Evergreen Forest            |
| (C) Compound leaves | (F) Papilaceous Corolla         |

4 Give salient features of the family, Meliaceae. Classify systematically any three plants which you studied with Sanskrit name, part used and uses.

- (A) Preparation of Herbarium specimens.  
(B) Define Inflorescence, types along with the suitable examples.

5 Classify along with Botanical name, Sanskrit name, Part used and uses of following (any five)

- (A) Ati Visha  
(B) Sitaphala  
(C) Guduchi  
(D) Bala  
(E) Bahu Phali  
(F) Parisha

\*\*\*\*\*

**GUJARAT AYURVED UNIVERSITY**  
**JAMNAGAR**

M.Sc. Medical Plants FIRST Year Annual Examination - August 2017

**DRAVYAGUNA**

DATE:- 02-08-2017  
Wednesday

TIME 10:00 A.M. TO 1:00 P.M.  
Max. Marks :- 100

---

**Note :-**

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 What are useful plant parts ? Describe with example how many 'parts use' of medicinal plants are there and explain their importance.
- 2 Describe the history of Ayurveda in brief and put a brief note on sources of drugs in Ayurveda.
- 3 Write the latin name, family, therapeutic properties, formulations, uses and parts use of **any four** of the following.  

(A) Guggulu	(C) Gokshuru	(E) Nimba
(B) Punarnava	(D) Kutaja	
- 4 Write the latin name, two synonyms, parts use, formulations and major therapeutic indications of the following drugs :  

(A) Aswagandha
(B) Amalaki
(C) Haritaki
(D) Brihati
(E) Arjuna
- 5 Write latin name, market name, part use, major chemical constituents and formulations of the following families. (At least two plants from each family).  

(A) Fabaceae	(C) Menispermaceae
(B) Malvaceae	(D) Rutaceae
- 6 Write short notes on **any four** of the following :  

(A) Panchamahabhuta
(B) Rasa
(C) Tridosha
(D) Medhya
(E) Swarasa Kalpana

\*\*\*\*\*

**GUJARAT AYURVED UNIVERSITY**  
**JAMNAGAR**

M.Sc. Medical Plants FIRST Year Annual Examination - August 2017

**MEDICINAL PLANTS CULTIVATION**

DATE:- 03-08-2017  
Thursday

TIME 10:00 A.M. TO 1:00 P.M.  
Max. Marks :- 100

---

**Note :-**

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 Define Soil and its profile. Discuss its various types of soil in India.
- 2 Define phytogeography. Discuss in detail phytogeographic areas of India with flora.
- 3 (A) How Panchamahabhuta effects on Ayurvedic raw drugs with suitable examples.  
(B) Describe Kunapajala and its formulation.
- 4 Define reproduction. Discuss methods of reproduction W.R.T. medicinal plants.
- 5 Define diseases. Discuss various types of diseases of medicinal plants which you studied add a note on controlling measures.
- 6 Give GAP and GCP of following medicinal plants (**any five**).
  - (A) Maricha.
  - (B) Swetha Musali.
  - (C) Guduchi.
  - (D) Mandukaparni.
  - (E) Kumari.
  - (F) Kalamegha.

\*\*\*\*\*

**GUJARAT AYURVED UNIVERSITY**  
**JAMNAGAR**

M.Sc. Medical Plants FIRST Year Annual Examination - August 2017

**PHARMACOGNOSY**

DATE:- 04-08-2017  
Friday

TIME 10:00 A.M. TO 1:00 P.M.  
Max. Marks :- 100

---

**Note :-**

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 Discuss evaluation of crude drugs with suitable examples.
- 2 What is carbohydrate ? Classify them in detail with suitable example and write a note on soluble saccharide.
- 3 Explain Permanent tissues and its importance in drug identity.
- 4 Enumerate saponin in detail and write any two drugs containing them.
- 5 What is Tannin ? Discuss in detail. Mention various chemical tests to detect them.
- 6 Define volatile oil. Discuss various distillation methods with appropriate examples.
- 7 Write a note on following :
  - (A) Condensed Tannin.
  - (B) Swelling factor.
  - (C) Explain gums are pathological products of plant..

\*\*\*\*\*

**GUJARAT AYURVED UNIVERSITY**  
**JAMNAGAR**

M.Sc. Medical Plants FIRST Year Annual Examination – August 2017

**PHYTOCHEMISTRY**

DATE:- 05-08-2017

TIME 10:00 A.M. TO 1:00 P.M.

Saturday

Max. Marks :- 100

---

**Instructions :** 1. Attempt any five questions.  
2. All questions carry equal marks.

1. Write down the principle, instrumentation and applications of Refractometry in detail.
2. Define Chromatography and discuss the Thin Layer Chromatography in detail.
3. Discuss about Chemical shift and Spin Spin coupling in NMR.
4. Discuss the Microbial and Radioactive contamination in medicinal plants and their products.
5. Discuss the criteria for Standardization and Quality control of Herbal Drugs and their products.
6. Write short note on any **Two** of the following :
  - A. Different electronic transition in UV spectroscopy.
  - B. pH metry
  - C. Applications of IR Spectroscopy.

\*\*\*\*\*