

GUJARAT TECHNOLOGICAL UNIVERSITY
M. PHARM - SEMESTER-II • EXAMINATION – SUMMER 2016

Subject Code: 2920105**Date: 19/05/2016****Subject Name: Advanced Analytical Pharmacognosy****Time: 10:30 AM To 1:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) | Write a note on spirulina and marine toxins. | 06 |
| | (b) | Explain in detail about volatile matter estimation. | 05 |
| | (c) | Explain in detail about Churna, Vati and Gutika with explanation of their standardization parameters. | 05 |
| Q.2 | (a) | Write a note on anticoagulant, antiviral and cardiogenic agents derived from marine sources. | 06 |
| | (b) | Explain in detail about Ghrita and Taila with explanation of their standardization parameters. | 05 |
| | (c) | Write a note on microbial contamination in herbal drugs. | 05 |
| Q.3 | (a) | Explain basic principles of Ayurveda. | 06 |
| | (b) | Explain in detail about Foaming Index and Swelling Index. | 05 |
| | (c) | Write a note on chromatography for evaluation of herbal drugs. | 05 |
| Q.4 | (a) | What is standardization? Classify various parameters of standardization of herbal drugs and herbal formulations according to WHO. Explain different Ash Values and Extractive Values in detail. | 06 |
| | (b) | What is the importance of Heavy Metal Analysis in standardization herbal formulations? Write their limits. | 05 |
| | (c) | Write about Bitterness Value & estimation of Tannin content? | 05 |
| Q.5 | (a) | Classify various Ayurvedic formulations. Explain in detail Asava and Arista with explanation of their standardization parameters. | 06 |
| | (b) | What is the difference between TLC & HPTLC? Write instrumentation of HPTLC. | 05 |
| | (c) | How GC can be useful in standardization of herbal medications. | 05 |
| Q. 6 | (a) | What is stability? Write a note on stability testing of natural products. | 06 |
| | (b) | What is the advantage of using UV in standardization of herbs? | 05 |
| | (c) | Write the importance of microscopic and macroscopic evaluation for standardization of herbs. | 05 |
| Q.7 | (a) | Write down regulatory and safety measures for drugs with traditional drugs. | 06 |
| | (b) | What are different types of Stomata and Trichomes? | 05 |
| | (c) | Write about different types of Vascular Bundles? Differentiate between Dicot and Monocot Leaves, Roots and Stem. | 05 |
