

GUJARAT TECHNOLOGICAL UNIVERSITY**M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER • 2015****Subject Code: 2920205****Date: 16-05-2015****Subject Name: Advances in Pharmaceutical Sciences****Time: 10:30 am - 01:30 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 camptothecin and its synthetic analogues. | 06 |
| | (b) Discuss pyrethrum as mosquito repellants. | 05 |
| | (c) Write in detail about anticancer agent and its underground source. | 05 |
| Q.2 | (a) Write in detail about nutritive role of omega 3 fatty acids. Give details of plant sources containing them. | 06 |
| | (b) Enlist plants used as brahmi, Write their source, family and chemical constituents. | 05 |
| | (c) Discuss ginseng as an immunomodulator. | 05 |
| Q.3 | (a) Discuss the natural drugs of your syllabus that are used as cardiogenic. | 06 |
| | (b) Write different chemical tests for screening of tannins in general and also for different classes of this group. | 05 |
| | (c) Write a note on anti-ulcer drugs from natural source. | 05 |
| Q.4 | (a) What is the role of antioxidants? Discuss groups of phyto-constituents possessing antioxidant potential. | 06 |
| | (b) Discuss mechanism of action of artemisinin and quinine. | 05 |
| | (c) Write a note on insecticides and pesticides from natural source. | 05 |
| Q.5 | (a) Discuss Borntrager's test and its modifications required for identification of anthraquinones and their reduced derivatives. | 06 |
| | (b) Discuss in detail about Indian gentian. | 05 |
| | (c) Write a note on calenolides. | 05 |
| Q. 6 | (a) Enlist plants used as antidiabetic. Write their source, family and chemical constituents. | 06 |
| | (b) Discuss garlic and methi as anti-lipidemic drugs. | 05 |
| | (c) Give in detail the chemical tests for screening the presence of Alkaloids and Carbohydrates. | 05 |
| Q.7 | (a) Write a note on methods for screening presence of saponins in crude drugs. | 06 |
| | (b) Write a note on alkaloids of vinca and their semisynthetic analogues. | 05 |
| | (c) Write a note on anti-inflammatory drugs from natural source. | 05 |
