Subject code: 2920102

GUJARAT TECHNOLOGICAL UNIVERSITY M. PHARM. - SEMESTER - II • EXAMINATION - WINTER 2012

Date: 10-01-2013

Subject Name: Novel Drug Delivery System Part- I 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. **Q.1** (a) Discuss factors affecting drug release from osmotic drug delivery systems. 06 05 (b) Discuss controlled release parenteral injections with suitable examples Discuss types of oral osmotic capsules based o in-vitro release mechanism (c) 05 with examples. Discuss pharmaceutical factors to be considered in designing of colon **Q.2** (a) **06** targeted drug delivery system. (b) Discuss approaches to deliver intact molecule to the colon. 05 05 (c) Describe various mechanisms applied in preparation of floating formulations. **Q.3** 06 (a) Discuss evaluation parameters for floating formulations. Describe methods to determine muco-adhesion property of formulations. 05 (b) (c) Discuss in brief delivery systems for oral mucosa. 05 **Q.4** Describe recent innovations in Meter dose inhaler. 06 (a) Write a detail note on non-animal capsule shells. (b) 05 Write a detail note on novel ophthalmic semisolid preparations. 05 (c) **Q.5** Discuss various approaches for parenteral DEPOT formulations. 06 (a) Discuss novel technology in implants. 05 (b) Write a short note on "coacervation phase separation" particle coating 05 (c) method. **O.** 6 Describe in brief the following taste masking approaches by using 06 (a) i) amino acids ii) ion exchange resins. Describe various methods for preparation of nanosuspension. (b) 05 Describe recent innovations in parenteral packaging. 05 (c) **Q.7** Describe primary, secondary & tertiary packaging. (a) 10 (b) Discuss recent innovations in emulsions. 06
