

M. SC. (Analytical Chemistry) Sem-III (Choice Based Credit & Grade System) : SUMMER - 2019

SUBJECT : ANALYSIS OF PHARMACEUTICALS

Day : Thursday
Date : 02/05/2019

S-2019-1179

Time : 03.00 PM TO 06.00 PM
Max. Marks :60

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written on **SEPARATE** answer book.

SECTION- I

Q.1 Answer **ANY THREE** of the followings: **(15)**

- a) Write history of Indian Pharmacopoeia [IP].
- b) Discuss the qualification and Duties of Govt. analyst.
- c) Write in short requirements for approval of quality control laboratories.
- d) Explain the term Drug and Misbranded drug.
- e) What does following schedules prescribes:
1) Sch. G 2) Sch. X 3) Sch. P 4) Sch. M 5) Sch. Y

Q.2 Answer **ANY THREE** of the followings: **(15)**

- a) Write the objectives of Drug and Cosmetic act 1940.
- b) Discuss the principle and apparatus for limit test for Arsenic.
- c) What are impurities? Explain the sources of impurities.
- d) Explain an Assay of Hydrogen Peroxide (IP).
- e) Discuss the Duties of Drug Inspector in relation to manufacturing of drugs.

SECTION-II

Q.3 Answer **ANY THREE** of the followings: **(15)**

- a) Define Expiry date. How will you calculate shelf life of drugs.
- b) Discuss the standards for tablet.
- c) What are emulsion? Discuss the quality control tests for emulsion.
- d) Enlist the quality control tests for parenterals. Explain in detail pyrogen test.
- e) Define and classify various pharmaceutical additives.

Q.4 Answer **ANY THREE** of the followings: **(15)**

- a) Explain teratogenicity and mutagenicity with example.
- b) What are suspensions? Write the ideal qualities and quality control test for suspension.
- c) Explain the phases of clinical trials with reference to ED⁵⁰ and LD⁵⁰.
- d) What are Capsules? Differentiate between hard gelatin and soft gelatin capsule.
- e) Describe ISO guidelines with special emphasis on ISO 9002.

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