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Total No. of printed pages = 4

PY 132709 (E3)

Roll No. of candidate

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2019

B.Pharm. 7th Semester End-Term Examination

**HERBAL DRUG TECHNOLOGY AND
PHARMACOLOGICAL SCREENING**

(Elective)

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Answer Question No. 1 and any *six* from the rest.

1. Choose the correct answer from the following :
(10 × 1 = 10)

(i) Time requirement for chronic toxicity study is

- (a) 14 days (b) 28 days
(c) 90 days (d) More than 90 days

(ii) The range of R_f value in TLC is _____,
suitable for selection of solvent system in flash
chromatography.

- (a) 0.15-0.2 (b) 0.1-0.2
(c) 0.25-0.3 (d) 0.3-0.35

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- (iii) Animal toxicology study comes under the schedule
- (a) Schedule P (b) Schedule Y
(c) Schedule W (d) Schedule M
- (iv) Water soluble extractives contain
- (a) Mucilage (b) Tannin
(c) Plant acid (d) All of above
- (v) Van-Urk reagent is used to detect
- (a) Ergot alkaloid
(b) Cinchona alkaloid
(c) Tropane alkaloid
(d) (b) and (c)
- (vi) Aloxan is used to induced
- (a) Inflammation (b) Hyperglycemia
(c) Hypoglycemia (d) Pyrexia
- (vii) Lipopolysaccharide is used in the pharmacological screening of
- (a) Analgesic activity
(b) Antipyretic activity
(c) Anti-inflammatory activity
(d) Anti diabetic activity
- (viii) Papaya latex is used to induce
- (a) Inflammation (b) Arthritis
(c) Pain (d) Swelling

- (ix) Cotton pellet granuloma is a model for
- Acute inflammation
 - Chronic inflammation
 - Analgesic activity
 - Wound healing activity
- (x) The anthraquinone content of the drugs tested by
- Warming with glacial acetic acid giving red precipitate
 - Shaking the extract made by organic solvent with diluted ammonium-hydroxide the water phase gives red or orange colour
 - Extracting with water and precipitate with lead acetate showing blue colour
 - Making a water extract which shows green colour on sulphuric acid
2. What is NSAID? How to screen the antidiarrheal and anti-hypertensive agent? What is pylorus ligation method? Explain the procedure in details. (2+6+2+5)
3. Differentiate between acute, sub-acute and chronic toxicity study. Describe in details about the procedure used to determine LD50. Describe briefly about acute toxicity study for limit test of 2000 mg/kg bw as per OECD guidelines 425. (8+3+4)
4. (a) Discuss the instrumentation and isolation procedure of a compound with flash chromatography method.
- (b) How do you select solvent system to run flash chromatography?
- (c) Explain the advantages of flash chromatography over conventional method of isolation. (10+2+3)

5. (a) Specify the significance of ash content. How acid insoluble ash and sulphated ash determined?
- (b) Write in details about the possible ways of adulteration of herbal crude drugs. (4+8+3)
6. What do you mean Pharmacological screening of herbal drug. Describe the various methods for evaluation of antioxidant properties and anti-diabetic properties. (2+6.5+6.5)
7. Write the bioassay of: (3 × 5)
- (a) Oxytocin.
- (b) Progesterone.
- (c) Estrogen.
8. Write short note on: (3 × 5)
- (a) Super critical fluid extraction.
- (b) Herbal cosmetics.
- (c) Standardization of herbal formulation.
9. (a) Write details method of estimation of tannin in herbal formulation. (7)
- (b) What do you mean by retention time? (2)
- (c) Why special test is implemented for animal study? Justify. (2)
- (d) Write short note on thalloquine test. (2)
- (e) Describe in details about "tail flick" method. (2)