### MANMOHAN TECHNICAL UNIVERSITY

### Office of the Controller of Examinations

Budiganga- 4, Morang, Koshi Province Nepal

School: Medicine and Allied Health Sciences

Year/Sem: I/II **Program: Bachelor of Pharmacy** FM: 50 **Subject: BP205 – Pharmacognosy** PM: 25 Time: 3 Hours **Group A (Multiple Choice Questions)**  $[10 \times 1 = 10]$ 1. Goldbeater's skin test is used for the identification of? a. Alkaloids c. Resins b. Tannins d. Glycosides 2. Synonym of Lactose is....? a. Pure sugar c. Milk sugar b. Crystalline sugar d. None of the above 3. Ring structure present in Morphine? a. Phenanthrene c. Indole b. Tropane **Imidazole** d. 4. The chief chemical constituent present in clove oil? a. Anethole c. Carvone b. Eugenol d. Fenchone 5. True alkaloids are present in plants as? a. Salts of organic acid c. Salt of meconic acid b. Salts of inorganic acid d. Salts of benzoic acid 6. Resins are classified into following except? a. Acid c. Resin ether b. Ester d. Resin alcohol 7. Aloe belongs to the class of......? a. C-glycoside c. O-glycoside b. N-glycoside d. S-glycoside 8. Which of the following carbohydrate is obtained from sea algae? a. Guar gum c. Tragacanth d. None of the above b. Agar 9. Which of the following crude drug is suitable for the extraction of volatile oil by Enfleurage method? a. Orange peel c. Flower petals of Rose b. Clove d. Sandal wood 10. The number of milligram of KOH required to combine with fatty acids which are present in

- glyceride form in 1 gram of sample of oil or fat is called?
  - a. Acid Value
  - b. Ester Value
  - c. Difference between Sap value and acid value
  - d. Both B and C

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### **GROUP-B**

### **Problem Based Questions**

[1X 10 = 10]

- 1. Suppose you are working as laboratory analyst in herbal drug industry and you have been provided a sample of plant leaves containing anomocytic stomata that belongs to Scrophulariaceae family with cardiotonic property, then
- a) Identify the given plant sample and write its morphology.
- b) Write about cardiac glycosides and its types.
- c) Write the general method of extraction and chemical tests for cardiac glycosides.

#### **GROUP-C**

# **Long Question (Any Four)**

 $[4 \times 5 = 20]$ 

- 2. What are alkaloids? Write the classification, general properties and identification tests for alkaloids.
- **3.** Explain in brief about the general methods associated with the phytochemical investigation of herbal drugs?
- **4.** Write about different sources of crude drugs. Explain the pharmacognostic scheme of Ephedra.
- **5.** Briefly explain about the biogenesis of aromatic amino acids.
- **6.** Write about WHO guidelines for quality control of herbal drugs.

# **GROUP- D**

# **Short Questions (Any Five)**

[5 X 2 = 10]

- **7.** What are the analytical parameters for fixed oils and fats?
- 8. Write the biological sources, chemical constituents and uses of Honey and Castor oil.
- **9.** Define and classify carbohydrates.
- 10. Define plant tissue culture. Write about the steps involved in Plant tissue culture.
- 11. Write about adulteration of crude drugs.
- 12. Write about scope of Pharmacognosy in brief.