

(b) You have given a mixture of '5' powdered crude drugs. One powder of the mixture answers Brontrager's reaction, the other legal's test, the third Haemolytic test, the fourth one vitali test and the last steroid alkaloid test. Name the powders and give an important microscopic character for each powder to identify the same from the mixture powder.

(i) (ii) (iii) (iv) and

(i) (ii) (iii) (iv) (v)

1×5=5

(c) (i) What are official drugs ?

(ii) Write an example of any drug which is obtained from animal sources.

(iii) What is I. P ?

(iv) Write an example of colouring agent.

(v) Write the name of one scientific journal of international repute. Wherein one could find publications on pharmacognostic investigation.

1×5=5

(d) State whether the following statements are true or false. If true, supplement your answers and if false correct and rewrite.

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(2)

(i) Adulteration is possible only when a drug is available in plenty and also very cheap.

(ii) Time of collection has a great influence on the quality of drugs.

(iii) We have pharmacological classification in I. P.

(iv) There is a considerable variation in the stomatal indices of a full mature leaf and a very young leaf of the same plant.

(v) Agar is completely soluble in water.

1×5=5

(e) Choose the correct answer : 1×5=5

(i) Freshly collected plants are submerged in boiling alcohol (95%) for a short time because of which the enzymes are destroyed in 2 minutes and this is the method of :

(Bourquelot, Arnold Goris, Perrot- Goris, None of them).

(ii) Lead subacetate solution when added to solution of unorganised drug gives a flocculent ppt. (Agar, Gelatin, Acacia, Guar gum).

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- (iii) Gum Tragacanth is obtained from the plants in their – (1st year, II year, III year, IV year).
- (iv) Shark liver oil contain vitamin – (F, D, A, C)
- (v) Essential oils are predominant in – (Umbelliferae, Liliaceae, Leguminosae, Scrophulariaceae)
- (f) (i) Explain why essential oils should be stored in amber coloured bottles.
- (ii) Ether is used at times in the isolation and extraction process of glycoside. Comment.
- (iii) Why free tannins are not suitable for oral use ?
- (iv) The swelling factor of a given sample of Ispaghula is 4.5 / 11 / 21 / 2.8. What are your conclusions ?
- (v) Why is tannic acid used as an antidote in cases of poisoning by alkaloids ?
1×5=5

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(4)

- (g) (i) What is the use of cod liver oil ?
- (ii) What is the use of Kaolin ?
- (iii) Write the botanical name of Chaulmoogra oil.
- (iv) What are active and inactive constituents?
- (v) What is the botanical name of Acacia ?
1×5=5

UNIT - II

Answer any *eight* questions. 5×8=40

2. (a) What are the items covered systematically under 'pharmacognostic report' of any crude drugs ?
- (b) Discuss the problems associated with drying and storage of crude drugs.
- (c) Discuss the application of TLC in the evaluation of crude drugs.
- (d) Write the morphological character of linseed with neat diagram.

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(5)

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- (e) Discuss the chemical classification of alkaloids with examples.
- (f) Write the botanical source, family, active constituents and uses of any drugs which contain 'Raicin'.
- (g) Write short note on pharmaceutical aids.
- (h) Give a descriptive account of the production of absorbent cotton wool. What are the standards prescribed in I. P ?
- (i) Discuss the importance of edaphic factors in the cultivation of medicinal plant.
- (j) Discuss the extraction and isolation of glycoside.

UNIT - III

Answer any *three* questions. $3 \times 10 = 30$

3. (a) What are crude drugs ? Stating briefly the various criteria on which they may be classified. Advance your critical comments on the one, you consider the most appropriate in the light of modern research. 10

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(6)

- (b) A consignment of crude drugs suspected to be infested with spores of micro-organisms and eggs of insects has reached you. Mention the steps you would take before storage so that it does not deteriorate further. 10
- (c) What are essential oils ? Describe the different methods to obtain essential oils. How do they differ from fixed oil ?
 $2+6+2=10$
- (d) Write an essay on the so called cash crop of Gujarat. 10
- (e) Write short notes on : $2 \times 5 = 10$
 - (i) Alkaloids
 - (ii) Resins.

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(7)

130(B)