

BP 603 T

2025

B.Pharm. 6th Semester (Regular) End-Term Examination

HERBAL DRUG TECHNOLOGY

Bina Choudhary Central Library
Girijananda Choudhary University
Hatkhowanara Azara, Ghy-17

Full Marks – 75

Time – Three hours

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

1. Multiple choice questions (MCQ) (Answer ALL questions) 1 × 20
- (i) Which of the following is a constituent of Fenugreek
- (a) Trigonelline (b) Isovanillin
(c) Eicosapentaenoic acid (d) Alicin
- (ii) Farmer's Right comes under
- (a) Seed Act 1966 (b) Indian Patent Act 1970
(c) PPVFR Act 2001 (d) None of the above
- (iii) Which of the following natural sweeteners have 30-150 times more sweetness than sugar
- (a) Liquorice (b) Honey
(c) Stevia (d) Bitter orange
- (iv) Which of the following is NOT a quantitative test for fixed oils and fats?
- (a) Viscosity (b) Reichert-Meissel value
(c) Peroxide value (d) Hydroxyl value
- (v) The ASU Pharmacopoeial limit for Lead in raw drugs is
- (a) 0.3 ppm (b) 1.0 ppm
(c) 1.3 ppm (d) 1.00 ppb
- (vi) Phrases, symbols and designs are protected under which IPR
- (a) Indian Patent Act, 1970
(b) Trademarks Act, 1999
(c) Copyright Act, 1957
(d) Design Act, 2000

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- (vii) In patients with G6PD enzyme deficiency, administration of Gingko may cause
- (a) bleeding (b) severe anaemia
(c) hypertension (d) seizures
- (viii) Which of the following is a bipyridyl pesticide:
- (a) Warfarin (b) Pyrethrin
(c) Paraquat (d) Malathion
- (ix) On September 1997, the US Patent office granted patent on an indigenous plant variety of India, which was later revoked. The plant variety is
- (a) Turmeric (b) Neem
(c) Basmati Rice (d) Tea
- (x) PPVFR Act 2001 complies with which article of TRIPs.
- (a) 27.3a (b) 27.3c
(c) 27.3b (d) 25.3b
- (xi) What is the meaning of "Swaras" in Ayurveda?
- (a) Decoction (b) Buttermilk
(c) Ghee (d) Expressed juice
- (xii) ASU Drugs Technical Advisory Board was formed according to which section of Drugs and Cosmetics Act, 1940?
- (a) Section 33C, Chapter IV (b) Section 30C, Chapter IV
(c) Section 30C, Chapter V (d) Section 33C, Chapter V
- (xiii) The international organisation for protecting the rights of indigenous knowledge systems is
- (a) Trade related Aspects of Intellectual Property Rights
(b) Convention on Biological Diversity
(c) World Intellectual Property Organization
(d) Traditional Medicines Congress
- (xiv) Which of the following is an incineration process?
- (a) Shodhana (b) Marana
(c) Chalan (d) Dhavan
- (xv) As per the Guidelines for testing of herbal medicines, a herbarium should be stored for how many years?
- (a) 3 years (b) 6 years
(c) 15 years (d) 10 years

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- (xvi) Which microorganism should be completely absent in herbal medicines intended for internal use
- (a) *E.coli* (b) *Salmonella*
(c) Yeast and molds (d) All of the above
- (xvii) Biological source of mannitol is
- (a) *Oryza sativa* (b) *Fraxinus ornus*
(c) *Manihot esculanta* (d) *Chondrus crispus*
- (viii) A manufacturer is required to submit the records of market complaints to the Licensing Authority once in every
- (a) 6 months (b) 3 months
(c) 12 months (d) 9 months
- (xix) For preparation of phytosomes, the most preferred ratio of phospholipids to phyto constituents is
- (a) 2:3 (b) 1:1
(c) 2:1 (d) 3:1
- (xx) Henna gives color to the hair due to the compound
- (a) Lawsone (b) Chlorophyll
(c) Curcumin (d) None of the above

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2. Short answer (Answer Seven):

7 × 5

- (a) Write a note on processing of herbal raw materials with respect to GCAP.
- (b) What are biodynamic agriculture? Enumerate some examples where microbes can be used as biopesticides.
- (c) Write in detail about the use of nutraceuticals in Irritable Bowel Syndrome and Diabetes.
- (d) Write a note on GMP (Schedule T) of ASU medicines.
- (e) Write a note on natural antioxidants & natural sweeteners.
- (f) Write a note on the preparation and standardization of Lehya.
- (g) Write a note on the preparation and standardization of Bhasma.
- (h) Write a short note on binders and diluents used as herbal excipients.
- (i) Describe the role of Spirulina as health food.

3. Long answer (Answer any Two):

2 × 10

- (a) What are herbal Cosmetics. Discuss quality control assessment of Herbal cosmetics.
- (b) Discuss the case studies of Neem and Turmeric with respect to the Patents Act, 1970 and TKDL.
- (c) Discuss the principle of preparation and applications of phytosomes with a neat labelled diagram.