

Duration: 3 hr

Total marks: 75

- N.B:** 1. All questions are compulsory
2. Figures to right indicate full marks
3. Draw structure where ever necessary

- Q. 1 Choose the appropriate option for following multiple choice-based questions. 20
- 1 Modern method of Drug identification is
- Macroscopy
 - Microscopy
 - DNA fingerprinting
 - Chemical tests
- 2 _____ is an undesired plant, it can produce losses more than any other pests or disease.
- Fungi
 - Viruse
 - Weed
 - Azotobacter
- 3 Which is not an evaluation parameter of Syrup.
- Viscosity
 - Microscopical evaluation
 - Reducing sugar
 - PH
- 4 Name the preparation known as Herbo mineral preparation.
- Asava
 - Vati
 - Gutika
 - Bhasmas
- 5 Azadirachtin is used as a _____
- Bioherbicide
 - Insect hormone
 - Natural insecticide
 - Natural herbicide

- 6 Name the nutraceutical used as phytoestrogen in menopausal symptoms.
- a Catechu
 - b Alfalfa
 - c Chicory
 - d Spirulina
- 7 Name the plant drug which is used as caffeine-free coffee.
- a Fenugreek
 - b Alfalfa
 - c Chicory
 - d Ashwagandha
- 8 Which plant drug decreases the efficacy of metformin.
- a Alfalfa
 - b Ephedra
 - c Ginseng
 - d Kava Kava
- 9 Which gum is reported for colon targeted drug delivery systems.
- a Aloe vera
 - b Guar gum
 - c Xanthan gum
 - d Pectin
- 10 Which non-ionic cellulose derivative is water soluble?
- a HPMC
 - b MCC
 - c CMC
 - d Ethyl cellulose
- 11 Coconut oil contains _____ saturated fatty acid as a chief constituent.
- a Lauric acid
 - b Oleic acid
 - c Linoleic acid
 - d Linolenic acid
- 12 Bixin is used as _____
- a Colorant
 - b Binder
 - c Sweetener
 - d Emulsifying agent

- 13 _____ is used in oral hygiene.
- a Meswak
 - b Momordica
 - c Nuxvomica
 - d Morphine
- 14 Bioprospecting is
- a Patenting naturally occurring substance
 - b Search for useful products derived from bioresources including plants
 - c Patenting the traditional knowledge
 - d Isolation of Phytopharmaceuticals
- 15 Name the constituent which is used as natural sweetener
- a Stevioside & Rubidoside
 - b Guar gum
 - c HPMC
 - d CMC
- 16 Name the parameter which access the safety of herbal drugs
- a Alcohol soluble extractive
 - b Percentage of Aflatoxin
 - c Water soluble extractive
 - d Foaming Index
- 17 Which schedule is proposed for clinical study of ASU Drugs
- a Schedule Z
 - b Schedule T
 - c Schedule M
 - d Schedule I
- 18 Machinery required for manufacturing of medicines comes under
- a Part 1
 - b Part II
 - c Both
 - d None
- 19 Name the research institute which is funded by Government of India
- a Zandu
 - b Patanjali
 - c Dabur
 - d Indian Institute of Integrative Medicine

- 20 Name the instrument used for heavy metal analysis
- Atomic absorption spectroscopy
 - Thin layer chromatography
 - UV spectroscopy
 - Gas chromatography

Q-2 Answer any Two **20**

- 1a** Define herb and herbal medicinal products. Explain any one modern tools for authentication of plants with examples. **5**
- 1b** Discuss any two nutraceuticals for cancer with marketed formulation. **5**
- 2** Discuss the importance of herbal raw material in cosmetics. Discuss sources and mechanism of action of herbal raw materials in preparation of skin care (Four examples). **10**
- 3** Define Patent, Biopiracy, Farmers right and breeders right, Discuss case study of Neem and Curcumin **10**

Q-3 Answer any seven. **35**

- 1** Write note on organic Farming **5**
- 2** Define Asava and Arishta, Explain method of preparation and standardization of Arishta **5**
- 3** Discuss following herbs as health food 1) Fenugreek 2) Spirulina **5**
- 4** Describe different types of herb drug interaction. Give the herb drug interaction of Hypericum and Kava Kava. **5**
- 5** Discuss plant based disintegrating agent and viscosity builder as pharmaceutical excipients in herbal formulations. **5**
- 6** Give the difference between Liposome & Phytosome. Enlist evaluation parameters of Phytosome and discuss advantages and application of phytosome with marketed formulation. **5**
- 7** Give the full form of DTAB ASU and DCC ASU. Explain composition and functions of DTAB ASU in detail. **5**
- 8** Outline the component of schedule T and its objective. **5**
- 9** Discuss current & future prospects of the herbal drug industry. Discuss any two Herbal Industries with its marketed products. **5**
