

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 12-05-2017
Friday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Define Vichitrapratyarabdha and Samanpratyarabdha. Elaborate each term with 10 examples.
2. Answer any one out of two questions. 10
 - A. Write the introduction, classification and speciality of Madanphala Nighantu.
 - B. Describe in detail the Takra Varga with its therapeutic importance.
3. Write a short note on any **Four** of the following : 20
 - A. Abhishyandi.
 - B. Stanya Shodhana.
 - C. Kaidev Nighantu.
 - D. Shaka Varga.
 - E. Navaneet Varga.
4. Answer any **Five** out of six questions : 10
 - A. Arshoghna.
 - B. Angamard Prashamana.
 - C. Anuvasanopaga.
 - D. Basonyms.
 - E. Ashmaribhedana.
 - F. Shimbidhanya.

SECTION-B

5. Define Mishrak Varga, describe in detail 'Panchatikta' with its therapeutic importance. 10
6. Write any **one** out of two questions : 10
 - A. Write the Basonym, synonyms, botanical name, family, part used, pharmacological action and therapeutic use of Guduchi.
 - B. Write the ingredients and collective action of Chaturbhadra with mode of action.
7. Write a short note on any **Four** of the following : 20
 - A. Panchamrut.
 - B. Mahasneha.
 - C. Sugandha Triphala.
 - D. Kshara Dwaya.
 - E. Trivrut.
8. Answer any **Five** of six questions : Write Botanical name, family, main action and 10
veerya of -
 - A. Lajjalu.
 - B. Madhuka.
 - C. Plaksha.
 - D. Patha.
 - E. Bimbi.
 - F. Agaru.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 13-05-2017
Saturday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What are Additives ? Classify them as per formulation. Discuss role of disintegration and bulking agent with examples. 10
2. Answer any **one** out of two questions. 10
 - A. Discuss the requirements of Ophthalmic products. Examples of Ophthalmic products in Ayurveda.
 - B. Define Suspension. Explain theory and evaluation parameters for Suspension.
3. Write a short note on any **Four** of the following : 20
 - A. Advantages of liquid dosage forms.
 - B. Methods for enhancing solubility.
 - C. Flocculated and deflocculated suspension.
 - D. Emulsifying agents and HLB value.
 - E. Power dosage forms in Ayurveda in brief.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Liniments.
 - B. Elixir.
 - C. Surface active agents.
 - D. Preservative.
 - E. Effervescent granules.
 - F. Classify powder.

SECTION-B

5. Define Suppository. What are different types of bases used for Suppository ? Enlist characteristics of ideal Suppository base. 10
6. Answer any **one** out of two questions. 10
 - A. Define Aerosol and explain its uses. Explain one method of its preparation.
 - B. Discuss the general formulation and bases for semisolid preparation.
7. Write a short note on any **Four** of the following : 20
 - A. Packaging methods of Aerosols.
 - B. Cold cream.
 - C. Difference between Gels and Jellies.
 - D. Evaluation methods of Suppositories.
 - E. Propellants.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Electuaries.
 - B. Cocoa butter.
 - C. Vanishing cream.
 - D. Bougies.
 - E. Shaving cream.
 - F. Herbal Shampoo.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 15-05-2017
Monday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What is Pharmacodynamics ? Write briefly about various types of drug receptors. 10
2. Write briefly about excretion of drugs. 10

OR

Enumerate factors which can modify drug response. Write briefly about disease factor.

3. Write short notes on any **Four** of the following : 20
A. Fixed Dose Combinations.
B. Methods for prolonging drug action.
C. Drug transport across the cell membrane.
D. Biotransformation.
E. Sublingual route of drug administration.
4. Answer any **Five** of the following :(two to three sentences) 10
A. Intra various route – Advantages & disadvantages.
B. Drug distribution.
C. Ion channels.
D. What is therapeutic index ?
E. Pharmacogenetics.
F. Placebo.

SECTION-B

5. Classify antiemetic drugs. Write briefly about prokinetic drugs. 10
6. Write in detail about cholinergic receptors. Name drugs which can block these receptors. 10

OR

Classify antiepileptic drugs. Write mechanism of action of phenytoin sodium.

7. Write short notes on any **Four** of the following : 20
A. Castor oil.
B. Diazepam.
C. Proton Pump inhibitors.
D. Beta-blockers.
E. Ayurvedic drugs used as carminatives.
8. Answer any **Five** of the following :(two to three sentences) 10
A. Name two alpha blockers.
B. Name receptors on which adrenergic drugs act.
C. Name two appetizers.
D. Name two antipsychotic drugs.
E. Write mechanism of action of levodopa.
F. Name two Ayurvedic drugs used for depression.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Pharmacognosy of Ayurvedic Drugs – II

Date: 16-05-2017
Tuesday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What is glycoside ? Discuss in detail. Write a note on drug containing Flavonoid glycoside. 10
 2. Define adulterant. How drugs are adulterated ? Explain in detail with examples. 10
- OR**
- What is API ? Discuss various aspects of API.
3. Write short notes on any **Four** of the following : 20
 - A. What are marine toxins ? Discuss in detail.
 - B. Differentiate Bramhi and Mandookparni.
 - C. Discuss various appearance of outer and inner surface bark.
 - D. What is forth number ?
 - E. Cynogenetic glycoside.
 4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define coumarin.
 - B. What is S-glycoside ?
 - C. Give structural formula of isothiocynate.
 - D. Define Rhamnoside.
 - E. Give botanical source, family and uses of Palash.
 - F. Write botanical name of two plants having bitter glycosides.

SECTION-B

5. What is steroidal alkaloid ? Discuss any one drug in detail. 10
 6. What is wax ? Discuss any one drug in detail. 10
- OR**
- Give detail account on condensed and Pseudo tannins and discuss different tests used to detect them.
7. Write short notes on any **Four** of the following : 20
 - A. What is the role of Triphala in Ayurveda ?
 - B. What are the botanical source, family uses and chemical constituents of Eranda and Nimba ?
 - C. Discuss species of Arjuna in detail.
 - D. Mention the various tests used to detect Alkaloids.
 - E. Explain why Gambair is pale brown and cutch is black in colour.
 8. Answer any **Five** of the following :(two to three sentences) 10
 - A. What is semi drying oil ?
 - B. Write two known preparations of Daruharidra ?
 - C. Define fat.
 - D. What is red Pepper ?
 - E. Give two examples of Tropane alkaloids.
 - F. Give biological source and uses of Ativisha.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Pharmaceutical Engineering

Date: 17-05-2017
Wednesday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Explain principle, contribution, working, mechanism uses along with neat diagram of Silverson emulsifier. 10
2. Answer any one out of two questions. 10
 - A. Explain principle and mechanism of power mixer.
 - B. Explain Ball mill in brief.
3. Write a short note on any **Four** of the following : 20
 - A. Factors affecting the size separation.
 - B. Difference between size separation and size reduction.
 - C. Double cone mixer.
 - D. Percolation.
 - E. Sedimentation tank.
4. Answer any **Five** of the following : 10
 - A. Define Maceration.
 - B. Preparation method of Beal liquid.
 - C. Define size reduction.
 - D. What is positive mixing ?
 - E. Define emulsifier.
 - F. Explain why the materials pressed while doing extractor.

SECTION-B

5. Explain molecular distillation. 10
6. Answer any one out of two questions. 10
 - A. How drying plays on important role in pharmacy with examples.
 - B. Define evaporation. Discuss, construction, working advantages of horizontal film.
7. Write a short note on any **Four** of the following : 20
 - A. Explain the theories of supersaturation and crystal growth.
 - B. Fluidized bed dryer.
 - C. Steam distillation.
 - D. Rotary evaporator.
 - E. Vacuum crystallizer.
8. Answer any **Five** of the following : 10
 - A. Give application of evaporating pan.
 - B. Give any two names of industrial scale distillation equipment.
 - C. Define thermoliable.
 - D. Difference between distillation and condensation.
 - E. Define drying.
 - F. Define rectification.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 18-05-2017
Thursday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What is Kshar ? Describe this kalpana. 10
 2. Describe sneha kalpana with an example. 10
- OR**
- Why is Pathya kalpana necessary ? Describe manda, Peya, Vilepi and Takra with its types.
3. Write short notes on any **Four** of the following : 20
 - A. Taila Murchana.
 - B. Kasisadi Taila.
 - C. Define Arka and describe Arka patan yantra with a diagram.
 - D. Narikela lavana.
 - E. Importance of Sneha kalpana and its use as per paka.
 4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Two examples of Masi kalpana.
 - B. Ingredients and use of Jatyadi ghrita.
 - C. Colour and odour of Mishreya arka.
 - D. What is Avartan in Sneha kalpana ?
 - E. Pinda taila – Ingredients and its Paka.
 - F. Shelf life of Sneha kalpana.

SECTION-B

5. Enlist the Uparasa dravyas with their English names. Describe Gandhak in detail. 10
6. State synonyms, shodhan, dose, toxicity, antidote and formulations of – Vatsnabha and Kupilu. 10

OR

Describe the apparatus used for Kupipakva rasayan and write the signs indicating when the Kupa can be corked.

7. Write short notes on any **Four** of the following : 20
 - A. Kasis shodhan and Maran.
 - B. Kampilaka.
 - C. Hartala bhasma.
 - D. Makardvaj.
 - E. Gandhak druti.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Grahya Bhallataka.
 - B. Types of Hartala and which is taken for medicinal use ?
 - C. How is Pottali administered to the patient ?
 - D. Enlist dravyas of schedule E (1).
 - E. Two formulations of each of Jaypal and Bhallataka.
 - F. Grahya Varatika

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May - 2017

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 19-05-2017
Friday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What is chromatography ? Explain advantages and disadvantages of different chromatography with respect to each other in detail. 10
2. Answer any one out of two questions. 10
 - A. What is planer chromatography ? Explain with instrumentation in detail.
 - B. Explain the principle of HPLC. How it differs from classical column chromatography. Describe only instrumentation of HPLC with diagram in detail.
3. Answer any **Four** out of five questions : 20
 - A. Visualization techniques of TLC.
 - B. Column packing techniques as in column chromatography.
 - C. Applications of gas chromatography in details.
 - D. Explain types of chambers and chamber saturation in H.P.T.L.C.
 - E. Non destructive detection techniques in chromatography.
4. Answer any **Five** out of six questions : 10
 - A. What is gas chromatography ?
 - B. By which spray reagent volatile oil components are visualised in T.L.C. ?
 - C. Chromatography.
 - D. Elutant.
 - E. NP-HPLC.
 - F. Chromatograph.

SECTION-B

5. Explain principles and instrumentations of Refractometry. 10
6. Write any **one** out of two questions : 10
 - A. What is flourescence ? Describe "Rotating Can" and "Rotating Disc" phosphoroscope in detail.
 - B. Give an account of flame emission spectroscopy.
7. Answer any **Four** out of five questions : 20
 - A. Applications of U.V. spectroscopy.
 - B. Explain turbidimetry in brief.
 - C. What is E.M.R. ? Explain spectroscopy in brief.
 - D. Different types of vibrations in I.R. spectroscopy.
 - E. Application of X-ray diffraction.
8. Answer any **Five** of six questions : 10
 - A. Source of U.V. radiation.
 - B. Wave length.
 - C. Monochromators of U.V.
 - D. Name ion exchange resins.
 - E. Bathochromic shift.
 - F. FT-IR.