

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination November-2014

Pharmaceutical Microbiology

Date: 21-11-2014
Friday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

SECTION-A

1. Write in brief contributions made by different scientists in microbiology in last 10 century. 10
2. Draw and label bacterial structure. Give details of chemical structure of bacterial cell wall. 10

OR

Write in brief transformation of bacteria and its experiment of Griffith.

3. Answer any **Four** of the following : 20
 - A. Viral multiplication phases and give detail of phase of release.
 - B. Enumerate important growth character on solid media which are helpful in identification.
 - C. Morphological classification of fungi.
 - D. Fermentation.
 - E. What is meant by Anaerobic Media ? Give an example of it.
4. Answer any **Five** of the following : 10
 - A. Give full forms of ABST and IMViC test.
 - B. Give an example of Enriched and Enrichment media.
 - C. Write in brief differences between fungi & bacteria.
 - D. Name the tests performed for assessing antimicrobial susceptibility.
 - E. Viruses contain (DNA / RNA). Bacteria contain (DNA / RNA). select as any one, none or both.
 - F. Give full forms of HIV, t-RNA & m-RNA.

SECTION-B

5. Define disinfection. Describe various methods used for it. Write in detail Alkylating Agents. 10
6. Describe factors predisposing to Pathogenicity. 10

OR

Define Antigen, Antibody. Write details of flocculation reactions.

7. Answer any **Four** of the following : 20
 - A. What is cross infection ?
 - B. Write type I hypersensitivity reaction in short.
 - C. Write in short on AIDS.
 - D. Which are possible sources of infection and give idea about human sources.
 - E. Describe neutralization test in brief.
8. Answer any **Five** of the following : 10
 - A. Give full forms of VDRL and RPR.
 - B. What is an average pore diameters of membrane filters for sterilization of liquid.
 - C. Give two examples of radiation used for sterilization.
 - D. Give two example of viruses transmitted via feco-oral route.
 - E. Give two example of autoimmune diseases.
 - F. Give full forms of HIV and HBsAg.

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B. Pharm(Ayu.) Final Year Examination November-2014

Ayurvediya Aushadha Nirmana Shastra - IV

Date: 20-11-2014
Thursday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

SECTION-A

1. What is Kshara ? How Kshara Sutra should be prepared and what are the utilities of it. 10
2. What are the ophthalmic preparations ? How they should be prepared ? Give details of aseptic measures which should be followed during their manufacturing. 10

OR

Describe method of preparation of Kutajarishita along with its quality standards.

3. Answer any Four of the following : 20
- A. Lepa and their utilities.
B. Kavala and Gandusha.
C. Swarna Vanga.
D. Sudha Varga Shodhana.
E. Nasal preparations with any one example.
4. Answer any Five of the following : 10
- A. Pravala Panchamrita Rasa.
B. Loha Shodhana.
C. Shadbindu Taila.
D. Dashanga Lepa.
E. Chandrodaya Varti.
F. Pravala Pishti Nirmana.

SECTION-B

5. What is Parada (Rasa) Bandha ? How it is helpful in the preparation of Rasoushadhi? 10
6. Describe the Shodhana and Marana of Mandura. 10

OR

Describe Bhasma Pariksha in detail.

7. Answer any Four of the following : 20
- A. Ratna Varga.
B. Sudha Varga.
C. Sikata Varga.
D. Shankha Vati.
E. Bilvadi Taila.
8. Answer any Five of the following : 10
- A. Shatadhauta Ghrita.
B. Dashanga Lepa.
C. Lohasava.
D. Shankha Shodhana.
E. Yashada Jarana.
F. Panchamrita Parpati.

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B. Pharm(Ayu.) Final Year Examination November-2014

Pharmaceutical Analysis of Ayurvedic Drugs -III (Q.C., Std., GMP)

Date: 19-11-2014
Wednesday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

SECTION-A

1. Discuss in process control for Asava Arista preparations. 10
2. How will you determine volatile oil as per pharmacopoeial method in Ayurvedic drugs ? 10

OR

Which parameters are required to be established for Asava preparation ? Explain their importance.

3. Answer any Four of the following : 20
 - A. Water insoluble ash in Churna.
 - B. Quality control parameters for Somanathi Tamra Bhasma.
 - C. Determination of alcohol content in Asava.
 - D. Explain mesh analysis.
 - E. Specific gravity of an oil sample.
4. Answer any Five of the following : 10
 - A. Define standardization.
 - B. What is a pharmacopoeia ?
 - C. What is Quality assurance ?
 - D. Calibration of an instrument.
 - E. Define refractive index.
 - F. Importance of acid insoluble ash.

SECTION-B

5. Explain with diagram, instrumentation of a U.V. spectrophotometer. What are its applications ? 10
6. What is GMP ? Explain GMP requirements for a Quality control laboratory. 10

OR

Explain with diagram, instrumentation of an atomic absorption spectroscopy.

7. Answer any Four of the following : 20
 - A. Applications of I.R.-spectroscopy.
 - B. Sources and uses of vitamin C.
 - C. Determination of total solids and water content in milk.
 - D. Determination of total sugar in honey.
 - E. Different shifts in NMR-spectroscopy.
8. Answer any Five of the following : 10
 - A. Define filters and monochromators.
 - B. Types of electronic transitions.
 - C. Use of hydrometers.
 - D. Define frequency and wavelength.
 - E. What is a monograph ?
 - F. Classification of vitamins.

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B. Pharm(Ayu.) Final Year Examination November-2014

Pharmacology & Toxicology of Ayurvedic Drugs -II

Date: 18-11-2014
Tuesday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams whenever necessary.

SECTION-A

1. Write classification of drugs used in treatment of bronchial asthma along with their mechanism of action. 10
2. Explain different aspects of hypertension and classify drugs used in its treatment. 10

OR

Classify drugs used in the treatment of angina pectoris with their mechanism of actions.

3. Answer any **Four** of the following : 20
A. Fibrinolytics.
B. Central cough suppressants.
C. Classification of anticoagulants.
D. Diuretics.
E. Process of blood coagulation.
4. Answer any **Five** of the following in brief : 10
A. Ayurvedic drugs used in treatment of cough.
B. Antiplatelet drugs.
C. Ayurvedic drugs used in heart disease.
D. Antiarrhythmic drugs.
E. Ayurvedic drugs used in anaemia.
F. Antidiuretics drugs.

SECTION-B

5. Write general classification of antimicrobial agents. 10
6. Explain prolactin in detail. 10

OR

Explain different types of immune reactions and the mechanism of action of drugs used for immunosuppression.

7. Answer any **Four** of the following : 20
A. Hypothalamic hormones.
B. Emollients.
C. Classification of antirheumatoid drugs.
D. Antifungal agents.
E. Psoriasis.
8. Answer any **Five** of the following in brief : 10
A. Antimalarial drugs.
B. Ayurvedic drugs having anti-inflammatory activity.
C. Ayurvedic drugs used in diabetes mellitus.
D. Selective cox-2 inhibitors.
E. Anticancer drugs.
F. Ayurvedic drugs used in skin disorders.

GUJARAT AYURVED UNIVERSITY

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B. Pharm(Ayu.) Final Year Examination November-2014

Pharmaceutical Biochemistry

Date: 17-11-2014
Monday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

SECTION-A

1. Write in detail structure of a typical animal cell. 10
2. Primary and secondary structure of proteins. 10

OR

Describe TCA cycle.

3. Answer any **Four** of the following : 20
A. Innate immunity.
B. Role of vitamin-A in our body.
C. Factors affecting BMR.
D. Classification of amino acids.
E. Obesity.
4. Answer any **Five** of the following (4 to 6 lines only) : 10
A. Define mutarotation.
B. Osmosis.
C. Non-protein amino acids.
D. Define epitope.
E. Define nitrogen balance.
F. Structural formula of glucose and fructose.

SECTION-B

5. Biological importance and classification of lipids. 10
6. DNA replication in prokaryotes. 10

OR

Mechanism of enzyme action.

7. Answer any **Four** of the following : 20
A. Xenobiotics.
B. Role of calcium in our body.
C. Thyroid function test.
D. Function of prostaglandins.
E. Signal conduction in neurons.
8. Answer any **Five** of the following (4 to 6 lines only) : 10
A. Define Km value.
B. What do you mean by synapse.
C. H.D.L.
D. Nitrogenous bases present in RNA.
E. Define transcription.
F. Gout.
