

Registration No:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 01

**B.Pharma.
PH.5.3**

5th Semester Back Examination 2017-18

Applied Microbiology

BRANCH : B.Pharma.

Time: 3 Hours

Max Marks: 70

Q.CODE: B120

**Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions : (2 x 10)**
- a) What does generation time mean? What is incubation period ?
 - b) What is the difference between 'stain' and 'strain'?
 - c) What is the meaning of mutation? Give one example of a mutagen.
 - d) Name one thermophilic and one mesophilic microorganism.
 - e) Why does the microbial growth curve plateau at the stationary phase?
 - f) Differentiate between transformation and transduction.
 - g) What is the other name of vitamin B12 and which microorganism can produce it?
 - h) Penicillin and Streptomycin are produced by which fungi?
 - i) What is dimorphic fungus? Give an example.
 - j) What is exotoxin? Define pyrogen.
- Q2 a) Write a note on membrane filtration technique. (5)**
b) Differentiate between probiotics and prebiotics. (5)
- Q3 a) Write down the different methods of microbial culture preservation. (5)**
b) Describe the principle of radiation sterilization. (5)
- Q4 a) Differentiate between flagella, cilia and fimbriae. (5)**
b) Briefly describe the basic features of Gram negative bacterial cell wall. (5)
- Q5 a) Differentiate between selective and differential media stating examples of each. (5)**
b) Briefly write about the different microbiological assays of antibiotics. (5)
- Q6 a) Describe the principle of Zeihl Neelsen staining. Which organisms can be viewed using this staining technique? (5)**
b) Differentiate between plasmid and genomic DNA. (5)
- Q7 Describe the working principle of an autoclave with mechanism of killing of microbes. (10)**
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Lyophilization.
 - b) Protoplast fusion.
 - c) SEM.
 - d) R.W. Coefficient.

Registration No:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 01

**B.Pharma.
PH.5.11**

**5th Semester Back Examination 2017-18
Community Pharmacy and Health Education
BRANCH : B.Pharma.**

Time: 3 Hours

Max Marks: 70

Q.CODE: B119

**Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions : (2x10)**
- a) What are the objectives of first aid?
 - b) What is Shock ?
 - c) Define physical health and mental health.
 - d) What is Epidemiology ?
 - e) What do you mean by balanced diet? Give example.
 - f) Write the two diseases occur due to malnutrition.
 - g) Write two live vaccines along with diseases in which they are used.
 - h) Which organ is affected in trachoma? What is causative organism of it?
 - i) Differentiate between tuberculoid and lepromatous leprosy.
 - j) What is trace elements? Give examples.
- Q2 Give the causative organisms, mode of transmission and prevention of the following communicable diseases :**
- a) Chicken pox (5)
 - b) Malaria. (5)
- Q3**
- a) Explain demography cycle with its different stages. (5)
 - b) Describe behavioural and mechanical methods of contraception. (5)
- Q4**
- a) Discuss descriptive epidemiology in detail. (5)
 - b) Write about the role of pharmacist in community health care. (5)
- Q5**
- a) Write on emergency treatment of snake bite or burns. (5)
 - b) Write short notes on cardio-pulmonary-resuscitation (CPR). (5)
- Q6**
- a) Write about oral contraceptive pills. (5)
 - b) Write on immunization schedule. (5)
- Q7 Write short notes on :**
- a) OTC Drugs (5)
 - b) HIV - AIDS (5)
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Legal requirements for establishment of Retail Drug Store.
 - b) MDR - TB.
 - c) Classification of different foods.
 - d) Sabin vaccine.

Registration No:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 01

B.Pharma
PH.5.9

5th Semester Back Examination 2017-18

Pharm. Analysis - II

BRANCH : B.Pharma

Time: 3 Hours

Max Marks: 70

Q.CODE: B123

**Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions : (2 x 10)**
- a) What is the self indicator?
 - b) Define the term oxidizing and reducing agent.
 - c) Mention the factors that affect diazotization titrimetry.
 - d) What is the principle involved in coulometry?
 - e) What is the equivalent weight?
 - f) Mention the application of pH meter.
 - g) Mention the applications of potentiometry.
 - h) What is the redox indicator?
 - i) What is the cell representation?
 - j) Define the term Iodimetry titration.
- Q2 a) Explain in detail about the Instrumentation of coulometry (5)**
b) Explain the theory involved in conductometry. (5)
- Q3 a) Define the term nephelometry and turbidimetry. (5)**
b) Write down the working principle of nephelometry and turbidometry. (5)
- Q4 a) How will you measure the electrode potential? (5)**
b) Explain the term oxidation-reduction curve with example. (5)
- Q5 a) What are the differences between zone electrophoresis and gel electrophoresis? (5)**
b) Discuss the process involved in gel electrophoresis. (5)
- Q6 a) Explain the theory involved in redox titration. (5)**
b) What are the differences between Iodimetry and Iodometry titration? (5)
- Q7 Explain the principle and procedure involved in Kjeldahl method for nitrogen estimation. (10)**
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Radio immuno assay
 - b) Karl Fischer titration
 - c) Polarography
 - d) Amperometry

Registration no.

--	--	--	--	--	--	--	--	--	--

Total Number of pages: 01

**B.Pharma.
PH.5.1**

5th Semester Back Examination 2017-18

Pharmaceutics –IV (Pharm. Tech. -I)

BRANCH: B.Pharma.

Time : 3 Hours

Max Marks :70

Q. Code: B118

**Answer Question No. 1 which is compulsory and any five from the rest .
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions : (2x10)**
- a) Classify liquid dosage form according to the route of administration.
 - b) Write on uses of Drops as liquid formulation.
 - c) Add a note on multiple emulsion.
 - d) What is phase inversion temperature and what is its significance?
 - e) Define suspension and mention the difference between flocculated and deflocculated suspension.
 - f) What is the need of granulation?
 - g) What type of problems may arise if lubricant is not added during tablet preparation?
 - h) Differentiate between cream and paste.
 - i) Write advantage of lanolin as ointment base.
 - j) How suspending agents act in a suspension ?Give some examples of suspending agents.
- Q2 a) Write short notes on Mouth dissolving tablet and Chewable tablet with example of each. (5)**
- b) Explain defects found in tablet dosage form during manufacturing ,and what are the reasons? (5)**
- Q3 a) Write about the types and rationale of different coating processes. (5)**
- b) Explain equipments involved in coating. (5)**
- Q4 a) What are the problems associated with the manufacturing of liquid dosage forms? (5)**
- b) Discuss in brief on various types of monophasic liquid dosage forms. (5)**
- Q5 a) Describe any one industrial scale filling machines for hard gelatin capsules. (5)**
- b) Write in brief on quality control and storage of capsule dosage form. (5)**
- Q6 a) What are the ingredients needed to manufacture soft gelatin shells and What types of different soft gel fill matrices are used ? (5)**
- b) What are the rationale for the selection of soft gels dosage forms? (5)**
- Q7 Write in detail on pharmaceutical Granulation equipments. (10)**
- Q8 Write short answer on any two of the following : (5x2)**
- a) Write on the mechanism of granule formation.
 - b) Write a short note on packaging system of liquid dosage forms.
 - c) Ideal properties of packaging materials.
 - d) Discuss about various types of creams.

5th Semester Regular Examination 2017-18

Pharmacognosy-III

BRANCH: B.Pharma

Time: 3 Hours

Max Marks: 100

Q.CODE: B116

Answer Question No.1 and 2 which are compulsory and any four from the rest.

The figures in the right hand margin indicate marks.

Q1 Multiple Choice Questions :

- a) Rhein is a (2 x 10)
 A) Sterol B) Anthraquinone C) Coumarin D) Phenol.
- b) Keller-Kiliani test is performed for the detection of
- c) Anthranilic acid is an intermediate in the biosynthesis of
 A) Tryptophan B) Tyrosine C) Phenyl alanine D) Ornithine
- d) Under UV radiation gentian extract shows fluorescence.
- e) *Cassia obovata* is commonly known as
 A) PaltheSenna B) Mecca Senna C) Egyptian Senna D) Dog Senna
- f) *Glycyrrhiza* belongs to the family of
 Liliaceae B) Leguminosae C) Solanaceae D) Pinacee
- g) Strophanthus glycosides + 80 % H₂SO₄
 A) Violet B) Crimson red C) Emerald green D) Cream
- h) Bitter wood obtained from dried stem wood of
- i) BAP is a
 Gibberalin B) Synthetic auxin C) Natural auxin D) Cytokinin
- j) *Panaxquinquefolium* represents
 American B) Chinese C) Korean D) Japanese variety of ginseng.

Q2 Answer the following questions :

(2 x 10)

- a) Distinguish between Cardenoloides and Bufadienolides.
- b) Give examples of two cytotoxic compounds obtained from marine source.
- c) Write down the biological source of Senega.
- d) Define the term 'totipotency'.
- e) Write down the biological sources of Trypsin and Pepsin.
- f) How would you detect anthraquinone glycoside in a crude specimen?
- g) Write down the biological source, chemical constituents and uses of Red Squill.
- h) Give examples of two probiotics.
- i) Write down the uses of Psoralea.
- j) What down the name of the precursors involved in the biosynthesis of Tropane alkaloids?

Q3 a) Define and classify plant tissue culture.

(5)

- b) Write an account on the nutritional requirements for the in vitro growth of plant tissue.

(6)

- c) Write down the applications of plant tissue culture in the production of bioactive plant metabolites.

(4)

- Q4** a) Define and classify glycosides with suitable examples. (5)
b) Write down the biological source, microscopic features, chemical constituents and uses of Indian Senna. (10)
- Q5** a) Describe schematically the 'Sta-Otto' method of isolation of glycosides. (5)
b) Write down the biological sources, chemical constituents and uses of Chirata and Rhubarb. (10)
- Q6** a) Write down the microscopic features of aloe leaf. (5)
b) Describe the methods of cultivation and collection of Digitalis and Dioscorea. (10)
- Q7** a) Describe the biosynthetic pathways for the bio-production of indole alkaloids and steroidal aglycones. (5 x 2 = 10)
b) Describe schematically the biosynthesis of different amino acids via. shikimic acid pathway. (5)
- Q8** a) Write down the biological sources, method of preparation, physical properties and uses of papain and diastase. (10)
b) Write note of poisonous plants of India. (5)
- Q9** a) Give an account on marine drugs with special emphasis on antimicrobial agents and marine toxins. (10)
b) Write short note on nutraceuticals. (5)

Registration No:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 01

**B.Pharma.
PH.5.7**

5th Semester Back Examination 2017-18

Pharmacology – I

BRANCH : B.Pharma.

Time: 3 Hours

Max Marks: 70

Q.CODE: B122

**Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions : (2 x 10)**
- a) Drug metabolism
 - b) Blood brain barrier
 - c) Tolerance
 - d) Teratogenicity
 - e) Therapeutic index
 - f) Idiosyncrasy
 - g) Plasma t_{1/2}
 - h) Bioavailability
 - i) Prodrug
 - j) Apparent volume of distribution
- Q2 a) Define and classify receptor. (5)**
b) Briefly discuss about enzyme linked receptor. (5)
- Q3 Write short notes on :**
- a) Synergism (5)
 - b) Antagonism (5)
- Q4 a) Discuss the different factors that responsible for parkinsonism. (5)**
b) Briefly discuss about L-dopa as antiparkinsonism drug. (5)
- Q5 a) Define analgesic. Classify analgesic drugs. (5)**
b) Write down the mode of action, therapeutic application and side effect of Aspirin. (5)
- Q6 a) Define and classify sedative and hypnotics. (5)**
b) Write shortly about Benzodiazepine. (5)
- Q7 a) What are the different stages of general anaesthesia. (5)**
b) Illustrate the term pre-anaesthetic medication. (5)
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Allopurinol
 - b) Narcotic analgesic
 - c) Tricyclic antidepressant