

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPB101

Paper ID: 0671102

Remedial Biology

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

- Write short notes on any five of the following (limit your answer in 50 words). (3x5=15)
 - Amoeba.
 - Mites
 - Plasmodium
 - Dicot Seed
 - Vascular bundles
 - Thallophyta
 - Karyokinensis
 - Parts of flowering plant
- Describe general structure and life history of mosquito. (12)
- What are adventitious roots? Explain different types of adventitious roots with diagrams. (12)
- Differentiate between the following: (3x4=12)
 - Angiosperm and Gymnosperm
 - Phylloclade and Phyllode
 - Fibres and Sclereids
- Write notes on the following: (6+6)
 - Draw and explain the structure of Ascaris
 - Draw and explain the structure of plant cell.
- Explain meiosis in detail with illustrations. (12)
- Describe life history of trypanosoma (12)
- Explain modifications of leaves with diagrams. (12)

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPM101

Paper ID: 0671101

Remedial Mathematics

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

- Answer any five of the following (limit your answer in 50 words). (3x5=15)
 - $1/(3-2x)+1/(5+2x) = 1/2$
 - if $A = \begin{vmatrix} 8 & 11 \\ 6 & 1 \end{vmatrix}$, $B = \begin{vmatrix} 4 & 7 \\ 6 & 5 \end{vmatrix}$, $C = \begin{vmatrix} 3 & 8 \\ 7 & 2 \end{vmatrix}$
Check whether $(A+B)+C = A+(B+C)$ or not?
 - Find mean from the data:
Marks: 15 10 18 45 70
No. of Students: 47 25 56 40 22
 - Define standard deviation and find it for the data:
2, 4, 5, 6, 8, 17
 - Define Range, Quartile Range and Rank Correlation.
 - Evaluate:
 $\tan 315^\circ + \cot(-405^\circ)$
 - Show that the three points
(-1,-1), (5,7) and (8,11) are collinear.
 - $y = \sin^{-1}x$ find dy/dx
- dfdf (2x6=12)
 - Solve the equation: (2x6=12)
 $(x^2 + 1/x^2) - 7(x + 1/x) + 14 = 0$
 - Solve by Cramer's rule:
 $x + y + z + 1 = 0$
 $x + 2y + 3z + 4 = 0$
 $x + 3y + 4z + 6 = 0$
- Solve with the help of matrices, the simultaneous equations: (6)
 $x + y + z = 3$; $x + 2y + 3z = 4$ and $x + 4y + 9z = 6$

b) Find mean & median for the following data:

Class:	0-10	10-20	20-30	30-40	40-50
Frequency:	07	08	05	03	07

4.

a) Find mode from the following data:

Age:	0-6	6-12	12-18	18-24	24-30	30-36	36-42
Frequency:	6	11	25	35	18	12	8

b) Find the mean deviation of the frequency distribution:

Class	0-6	6-12	12-18	18-24	24-30
Frequency	8	10	12	9	5

5.

a) Simplify:

$$\frac{\tan(90^\circ + \Phi)\sin(180^\circ + \Phi)\sec(270^\circ + \Phi)}{\cos(270^\circ - \Phi)\operatorname{cosec}(180^\circ - \Phi)\cot(360^\circ - \Phi)}$$

b) The two vertices of an equilateral triangle are (0,0) and (3,2), find the third vertex.

6.

a) if P(x,y) is any point on the line joining the points A(a,0) and B(0,b), then show that $x/a + y/b = 1$

b) Find the equation of a straight line passing through (-4,-5) and perpendicular to line joining (1,2) and (5,6).

7.

a) Evaluate the limit

$$\lim_{h \rightarrow 2} \frac{\sinh}{h} = 1$$

b) if $y = x + \sqrt{x^2 - 1}$; prove that $(y - x)dy/dx - y = 0$

8. Evaluate the following integrals:

a) $\int \frac{1}{(x-a)(x-b)(x-c)} dx$

b) $\int x^2 e^x dx$

(6)

(6)

(6)

(6)

(6)

(6)

(6)

(6)

(6)

(2x6=12)

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPH102

Paper ID: 0671103

Pharmaceutical Analysis-I

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

- Answer any five of the following (limit your answer in 50 words). (3x5=15)
 - Calculate the equivalent weight of potassium permanganate in acidic media (Mol. wt. of $\text{KMnO}_4 = 158$)
 - Why NaOH is not a primary standard?
 - 8 gram of NaOH is dissolved in 1000ml of water. Express its concentration in different ways.
 - Why Ammonium Chloride is not titrated with silver nitrate solution for its quantitative estimation. Which method is official in IP 2007.
 - Mention significance of quantitative analysis in quality control unit in Industry.
 - On what basis, indicator is selected in acid-base titration.
 - Why aluminium chloride is referred as acid?
 - Mention five oxidizing agents used in Redox titration.
- Discuss the Lowry and Bronsted concept of acids. Discuss the assay of phosphoric acid. (12)
- Describe the theoretical concept of Redox titration. How endpoint is detected in Redox titration. Mention the assay of Ferrous sulphate. (12)
- Why Volhard's method is preferred over Mohr's method. Discuss the assay procedure of sodium chloride according to IP 2007. (12)
- Write a informative notes on followings: (3x4=12)
 - Adsorption indicators.
 - Precision and accuracy.
 - Common ion effect.

6. How the pH of buffer solution is maintained. Discuss the importance of buffers in pharmacy. (12)
7. Dfdf
a) What are iodimetric and iodometric titrations? (6)
b) Give the method for preparation and standardization of 0.1N iodine solution. (6)
8. Write short notes on following: (3x4=12)
a) Gay-Lussac method
b) Theory of acid-base indicators.
c) Neutralization curves.

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPH103

Paper ID: 0101104

Pharmaceutical Chemistry-I

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Answer any five of the following (limit your answer in 50 words). (3x5=15)
a) Explain Hard and Soft acid-base (HSAB) concept?
b) Define Pyrogen and mention the significance of LAL test?
c) How will you prepare Activated Charcoal? Discuss its pharmaceutical importance?
d) Define sequestering agents with examples.
e) What do you mean by Blue, White and Green vitriol?
f) Explain the term half life and isotope?
g) Differentiate between Lugol's solution and Iodine tincture.
h) Discuss the colour coding system for Oxygen and Nitrous Oxide storage cylinders.
2. Classify Gastro intestinal agents with suitable examples. Give the method of preparation and assay of any three antacids. (3+9=12)
3. Write notes on any three of the followings: (3x4=12)
a) Limit test for chloride
b) Sterile Water for Injection
c) Boric Acid
d) Antidotes
4. What is the basis and importance of Limit test? Describe the Limit Test for Arsenic. (4+8=12)
5. Give the method of preparation, assay and uses of any three of the following: (3x4=12)
a) Calamine
b) Calcium gluconate

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPH104

Paper ID: 0671105

Pharmaceutics (G. Pharmacy)

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

- c) Sodium fluoride
 - d) Zinc sulphate
6. Define Haematinics? Give the method of preparation, tests for purity, identification test and uses of any two official compounds of iron. (2+10=12)
7. Attempt the followings: (3x4=12)
- a) Hazards and precautions of Inorganic radiopharmaceuticals.
 - b) Expectorants
 - c) Anaesthetics
- 8.
- a) What is Replacement Therapy? Discuss the role of different ions used in Replacement Therapy. (3+3=6)
 - b) What is Radio Activity? How the radiopharmaceuticals are produced? (3+3=6)

1. Answer any five of the following (limit your answer in 50 words). (3x5=15)
- a) The first edition of IP was published in the year
 - b) Explain the theory of mixing.
 - c) Tocopherols are (Surfactants/Antioxidants)
 - d) Write mathematical expression of Rittinger's law of size reduction.
 - e) What will be the proportion of 12%, 8% and 3% alcohol to be mixed to get 5% alcohol?
 - f) Define extraction.
 - g) Differentiate between Lotion and Liniments.
 - h) Write Dilling's Formula for calculation of children dose.
2. Write briefly the origin and development of Pharmacy profession in India. (12)
3. Define surfactants. Classify surfactants and explain its applications in pharmacy. (12)
4. Explain the principle of size reduction. Describe the construction and working of a equipment employed for size reduction. (12)
- 5.
- a) Describe the various formulae used for the calculation of infants dose. (6)
 - b) Write a note on "Alligation Method". (6)

6. Describe the various methods of drug extraction. Explain the factors affecting selection of extraction process. (12)
7. Write notes on any two: (6+6)
- Theory of drug extraction.
 - Proof Spirit.
 - Maceration & modified maceration technique.
8. Explain HLB value and its role in solubilisation (6)
- Describe the various mechanisms of size reduction. (6)

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPH105

Paper ID: 0671106

Anatomy, Physiology and Pathophysiology-I

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

- Answer any five of the following (limit your answer in 50 words). (3x5=15)
 - Define anatomy.
 - Write two important functions of nucleus.
 - Write functions of skeleton.
 - Write characteristics of smooth muscle.
 - What do you understand by muscle tone.
 - Explain blood groups.
 - Name two disease causing agents.
 - Write two methods by which disease can be prevented.
- Draw a diagram of cell. Write functions of any three components of cell(except nucleus). (12)
- Describe functions and structure of epithelial tissue. (12)
- Discuss basic structure of skeleton with diagram. (12)
- Describe physiology of muscle contraction with suitable examples. (12)
- Write mechanism of blood coagulation. Explain natural anticoagulant. (12)
- Give note on following: (6+6)
 - Classification and functions of joints.
 - Energy metabolism.
- Explain following diseases (6+6)
 - Hepatitis
 - Tuberculosis

B.Pharm Ist SEMESTER EXAMINATION 2009-10

Subject Code: BPH106

Paper ID: 0671107

Professional Communication

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Answer any five of the following (limit your answer in 50 words).
(3x5=15)
 - a) What are the eight parts of the speech? Define any two.
 - b) Explain the contents of a letter.
 - c) What is the importance of eye contact and voice modulation in a presentation?
 - d) Write 50 words on the topic "There should be no reservation for women in politics."
 - e) What is personality? Describe the determinant factors of personality.
 - f) What is non-verbal communication? Explain in brief the two major types of non-verbal communication.
 - g) Fill in the blanks with the correct verb, in its appropriate tense.
 - i) The earth..... round the sun.
 - ii) I him only one letter up to now.
 - iii) He..... a mill in this town.
 - h) What is motivation? Explain needs and wants in motivation
2. Write a Precis of the following: (12)

Over – eating is one of the most wonderful practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over – eat to their disadvantage. This class of people should save a great more food than they can save by missing one meal per week and at the same time they would improve their health. A heavy meal at night, the so – called dinner is the fashion with many and often it is taken shortly before retiring. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. From three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess-weight. The evening meal should be light taken three or four hours before retiring. This prevents over eating conserves energy and reduces the cost of food.
3. Elaborate on the relationship of personality and human behaviour. Explain the trait Theory and Self concept Theory of personality. (12)
4. Convert the following sentences from passive to active voice. (12)
 - a) by whom was this done?
 - b) The wounded man was being helped by some boys.
 - c) The wall is being built by the mason.
 - d) The work will be finished by him in a fortnight.
 - e) Why was such a letter written by your brother?
 - f) The gate was opened by the peon.
5. After successfully finishing your B.Pharm program you have gained admission into the M.Pharma program at the University of Delhi. You are required to submit a migration certificate from TMU from where you have done your B.Pharm. Write a letter to the Registrar of TMU requesting for a migration letter to be issued to you. (12)
6. Fill in the blanks: (6+6=12)
 - a) with suitable prepositions.
 - i) The dog ran the road.
 - ii) I am fond Music.
 - iii) He has not yet recoveredhis illness.
 - iv) I have not seen him Wednesday night.
 - v) I am sorry what I have done.
 - vi) God is good me.
 - b) with articles (a, an, or the):
 - i) able man has not always a distinguished look.
 - ii) Hones men speak truth.
 - iii) He returned after hour.
 - iv) You arefool to say that.
 - v) Let us discuss..... matter seriously.
 - vi) Man, thou art.....wonderful animal.
7. Describe the tips to make a presentation effective. (12)
8. What are the various factors responsible for attitude formation? How can these factors be controlled?

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH201

Paper ID: 0672106

Pharmaceutical Physical Chemistry

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Answer any five of the following (limit your answer in 50 words).
(3x5=15)
 - a) Describe Boyle's Law and Charles Law.
 - b) Define the term refractive index, surface tension and porachor.
 - c) What are miller indices. How are they determined?
 - d) Define internal energy and enthalpy of a system.
 - e) Describe order of reaction. What is its significance?
 - f) Define cooling curves and degree of freedom.
 - g) What is cell constant? How is it determined?
 - h) Differentiate physical and chemical adsorption.
2. Explain the kinetic theory of gases and also derive the different gas laws. (12)
3. Explain the term viscosity of a liquid. What are Newtonian and Non-newtonian liquids? Discuss the effects of temperature and pressure on the viscosity of liquid. (12)
4. Discuss in detail different types of crystals. (12)
5. Kkldkf
 - a) What do you mean by Joule Thomason effect? (2)
 - b) Explain the term Joule-Thomson coefficient. Derive the expression for ideal gas. (10)
6. State and explain Hess's Law of constant heat summation. Discuss the application of this law. (12)

7. Explain the acid base catalysis. Discuss the kinetics of acid-base catalysed reaction. (12)
8. Write note on any two: (6+6)
 - a) Phase rule
 - b) Debye Huckel theory of strong electrolytes
 - c) Langminer theory of adsorption

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH202

Paper ID: 0672107

Pharmaceutical Organic Chemistry

Time: 3 Hours

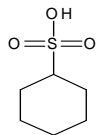
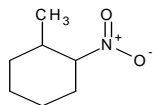
Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Explain any five of the following (limit your answer in 50 words).

(3x5=15)

- Huckel rule
- R & S configuration
- Covalent and ionic bond
- Stereoisomerism
- Distereomer and Enantiomer
- O.P-activating and deactivating groups
- Friedal Gaft's alkylation
- Name the two :



2.

- Differentiate atomic and molecular orbital. Discuss types and shapes of different orbitals. (6)
- Define Resonance. Explain it with suitable examples. (6)

3. Explain SN¹ and SN² mechanisms with suitable examples. (12)

4. Define configuration. Discuss various specifications of configuration. Support your answer with suitable example. (12)

5. Give the methods of preparations of : (6+6)

- Alkyl Halides
- Alkenes

6. Write a note on: (6+6)

- Electrophilic aromatic substitution
- Electrophilic addition reactions

7. Explain: (6+6)

- Reimer - Tiemann Reaction.
- Aldol condensation.

8. Write down the preparation and chemical reactions of ketones. (12)

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH203

Paper ID: 0672108

Human Anatomy, Physiology and Pathophysiology II

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Write short notes on any five of the following (limit your answer in 50 words). (3x5=15)
 - a) Sympathetic Nervous System.
 - b) Optic Nerve
 - c) Mesenteric Lymph nodes
 - d) Mechanoreceptors
 - e) Cardiac Resuscitation
 - f) Hypovolemic Shock.
 - g) Neural Affliction in Leprosy
 - h) Miliary Tuberculosis
2. Discuss in detail the Patho-physiology, causative organism and mode of spread of Poliomyelitis. (12)
3. Discuss in detail the Medical termination of Pregnancy. (12)
4. Discuss in detail the course of Olfactory Nerve. (12)
5. Discuss in detail the function of (6+6)
 - a) Cerebellum
 - b) Basal Ganglia
6. Discuss in detail about Anatomy and Relationships of Internal Capsule with the help of diagrams. (12)
7. Discuss in detail about: (6+6)
 - a) Parasympathetic Nervous System.
 - b) Course and function of Vagus Nerve.

8. Discuss in detail about:

(6+6)

- a) Pathophysiology of Malaria
- b) Rule of Nine in Burns

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH204

Paper ID: 0672109

Computer Fundamental and Programming

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Write short notes on any five of the following (limit your answer in 50 words). (3x5=15)
 - a) Distinguish between RAM & ROM.
 - b) Explain system software and application software.
 - c) Define flow chart. Write name of different type of boxes used in flow chart.
 - d) Write syntax of printf().
 - e) Write syntax of while() loop used in C.
 - f) Explain break and continue statements used in C.
 - g) Write three main differences between a file system and a database system.
 - h) Define compiler.
2. Distinguish between LAN and WAN. Also explain different types of Network topologies. (12)
3. What is Data Processing? Explain Business Data Processing in detail. (12)
4. Write algorithm to find the sum and average of first twenty natural numbers. (12)
5. Write algorithm or develop program to find the sum of digits of a number. (12)
6. Write a detailed note on control structures used in C i.e. looping control structures for(), while(), do-while() and if()...else (conditional structure). (12)
7. Write a detailed note on uses of internet also mention its merits and demerits. (12)
8. What is the use of computer in pharmaceutical and clinical studies? Explain. (12)

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH205

Paper ID: 0672110

Advance Mathematics

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Attempt any five of the following (limit your answer in 50 words).
(3x5=15)
 - a) Solve: $(dy/dx) = e^{x+y} + e^y x^2$.
 - b) Solve: $(dy/dx) + 2xy = 4x$
 - c) What are the advantages of systematic sampling?
 - d) Solve the differential equation
 $(d^2y/dx^2) - 7(dy/dx) + 12y = 0$
 - e) Solve the differential equation:
 $(d^2y/dx^2) - 5(dy/dx) + 6y = e^{4x}$
 - f) What are the various method used for representing a frequency distribution graphically.
 - g) The Karl Pearson's coefficient of skewness for a distribution is 0.32, its mean is 29.6 and standard deviation is 6.5. Find the mode.
 - h) Write down the first four moments of Binomial distribution ie $\mu_1, \mu_2, \mu_3,$ and μ_4 .
2. Solve: (12)
 $x(dy/dx) + y = xy^3$
3. Solve: (12)
 $x^2y.dx - (x^3 + y^3)dy = 0$
4. Define the following term as used in Statistics: (6+6)
 - a) Popule and Sample
 - b) Parameter and Statistics
5. Solve the differential equation (12)
 $(D^2 - 2D)y = e^x \sin x$

6. Compute the Mode of the following distribution: (12)

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	22	35	40	62	50	45	40

7. Solve the Simultaneous differential equation : (12)
 $(dx/dt) + 7x - y = 0$
 $(dy/dt) + 2x + 5y = 0$
8. Five coins are tossed 3,200 times; find the expected frequencies of the distributions of heads and tails and tabulate the result.. (12)

B.Pharm II SEMESTER EXAMINATION 2009-10

Subject Code: BPH206

Paper ID: 0672111

Professional Communication II

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Write short notes on any five of the following (limit your answer in 50 words). (3x5=15)

- Requisites of good sentence writing.
- Development of Paragraph
- Origin of Technical Writing
- Definition of of Technical Writing
- Importance of presentation skills.
- Role-Plays.
- Gandhiji's approach to other religions.
- Meaning of being civilized.

2.

a) Translate into English: (6)

एक औषधि निर्माता था। उसके कारखाने में विभिन्न प्रकार की दवाईयाँ बनती थी। चूँकि उसकी दवाईयें निम्न स्तर की थी, वह दूकानदारों को औरो से कम कीमत पर दवाईयाँ देता था। इस कारण दुकानदारों को अधिक लाभ होता था। एक दिन उसका इकलौता बेटा बीमार पडा। उसकी तबियत बिगडती गयी। डाक्टरों ने उसके सभी परीक्षण किए। यह पाया गया कि बीमारी कोई गंभीर नहीं है। अन्त में उसको विदेशी कम्पनी की दवा दी गयी। जल्द ही वह पूर्ण रूप से ठीक हो गया। उस दिन उस औषधि निर्माता ने प्रण किया कि वह नकली दवाईयाँ कभी नहीं बनाएगा।

b) Translate into Hindi: (6)

One day, Chandu the barber's son, was abused and insulted for dressing up in a white turban, a white coat, and a pair of shoes with a leather bag in his hand. However, chandu was not ready to accept the insult as his forefathers did. He wanted to make a new beginning. He decided to stop serving the village elders and earn his bread by working in town.

- What is a Paragraph? Describe the essential elements of a paragraph. (4+8)
- Explain the chronological order in organizing information in a paragraph. What are its advantages and disadvantages? (6+6)
- What are the features of technical writing? How could technical writing be distinguished from general writing? (6+6)
- Narrate the entire process of a good presentation. (12)
- Making Writing Simple by JB Priestley is a reflective essay which highlights the significance of simplicity in writing. Discuss. (12)
- What, according to C.E.M. Joad are the merits and demerits of modern civilization? (12)

B.Pharm III SEMESTER EXAMINATION 2010-11

Course Code: BPH301

Paper ID: 0673107

Pharmaceutics II (Unit Operation-I)

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Describe any five of the following terms (limit your answer in 50 words). (3x5=15)

- a) Reynold's Number.
- b) Filter aids
- c) Principle of centrifugation
- d) Electrical hazards
- e) Super saturation theory of crystallization
- f) Streamline Flow
- g) Principle of Refrigeration.
- h) Wet bulb thermometer.

2. a) What is Psychometric chart? Describe the method to use it. (6)
b) Explain the humidity measurement and its applications in pharmacy. (6)

3. a) Write the principle and applications of air conditioning. (6)
b) Write a detailed note on Swenson-Walker crystallizer. (6)

4. Explain the factors affecting filtration. Describe the working of a filter press, giving a diagram. (12)

5. a) Describe the significance of measurement of flow and pressure in pharmacy. (6)
b) Explain the working of a venturi meter, giving a diagram. (6)

6. a) Differentiate between purified water and water for injection. Explain their significance in pharmacy. (6)

b) Describe a equipment used for dehumidification, giving a diagram. (6)

7. a) What is a valve? Classify various types of valves used in unit operations. (6)

b) Differentiate between filter media and filter aids, giving examples.

8. a) Explain the principle applications and limitations of super saturation theory. (6)

b) Write a note on Rotary filters. (6)

B.Pharm III SEMESTER EXAMINATION 2010-11

Course Code: BPH302

Paper ID: 0673108

Pharmaceutical Jurisprudence and Ethics

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Describe any **five** of the following (limit your answer in 50 words).
(3x5=15)
 - a) Patent and Proprietary medicines
 - b) Cannabis and Coca
 - c) Schedules and Acts
 - d) Schedule 'H' Drugs
 - e) Schedule 'X' Drugs
 - f) Misbranded Drugs
 - g) Schedule 'M' Drugs.
 - h) Schedule G and schedule J Drugs
2.
 - a) Write a note on "Pharmaceutical Code of Ethics". (6)
 - b) Give a brief account of "Drug Technical Advisory Board". (6)
3.
 - a) Explain the constitution of Pharmacy Council of India. (6)
 - b) Write a note on "Pharmacy Act, 1948". (6)
4. Explain the salient features of any two: (6x2=12)
 - a) Package and Commodity Act
 - b) AICTE Act, 1987
 - c) Patent Act, 1970.
5. Explain the qualifications, duties and powers of a Drugs Inspector. (12)

6. Dfdf
 - a) Explain Medical Termination of Pregnancy Act, 1970 and Rules 1975. (6)
 - b) Write a note on "Prevention of Cruelty to Animals Act, 1961. (6)
7. Give the procedure for obtaining licences for manufacturing and sale of drugs (Schedule C and C₁) under the Act. (12)
8. Describe in detail the Narcotic drugs and Psychotropic Substances Act, 1985. (12)

B.Pharm III SEMESTER EXAMINATION 2010-11

Course Code: BPH303

Paper ID: 0673109

Pharmacognosy - I

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Write short notes on any **five** of the following (limit your answer in 50 words). (3x5=15)
 - a) Polyploidy
 - b) Honey
 - c) Wool pat
 - d) Quantitative microscopy
 - e) Adulteration of crude drugs
 - f) Tissue culture as source of drugs
 - g) Types of soils
 - h) Scope of Pharmacognosy
2. What do you understand by the term “Drug Evaluation”? Describe different methods of ‘Drug Evaluation’. (12)
3. Write various factors influencing cultivation of medicinal plants with examples. (12)
4. Describe biological and mineral as sources of drugs. (12)
5. Write various methods of classification of drugs with their merits and demerits. (12)
6. Write biological source, chemical constituents and uses of
 - a) Acacia
 - b) Castor oil
 - c) Starch

7.
 - a) Explain various natural pest control agents. (6)
 - b) Write fertilizers of common use with example. (6)
8. Describe characteristic features of Apocynaceae family. Write biological source and uses of any two medicinally important plants belonging to this family. (12)

B.Pharm III SEMESTER EXAMINATION 2010-11

Course Code: BPH304

Paper ID: 0673110

Pharmaceutical Organic Chemistry-II

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Answer any five of the following (limit your answer in 50 words).

(3x5=15)

- Compare nucleophilic and electrophilic addition at α , β - unsaturated carbonyl compounds.
- Give any two methods for synthesis of furan.
- What is fisher indole synthesis?
- Discuss mannich reaction.
- How will you differentiate reducing and non reducing sugars?
- How DCC can be used in peptide synthesis?
- Write any three identification tests for fats.
- Write down mechanism of Mecrwein Pondorff Verley reduction.

2. Discuss malonic ester synthesis of carboxylic acid in detail. (12)

3. Describe preparation and properties of imidazole, thiophene and pyrimidine. (12)

4. Explain Beckmann rearrangement and Oppeneaur oxidation in detail. (12)

5. Elucidate cyclic structure of D-(+)-glucose. Discuss anomers and epimers. (12)

6.

- Give any two methods for synthesis of amino acids. (6)
- Discuss structure of DNA. (6)

7.

- Describe fries rearrangement. (6)
- Write down structures of sucrose, lactose and maltose along with nomenclature. (6)

8. Write short notes on any **three**: (4x3=12)

- Knoevanegal reaction
- Chemistry of pyridine
- Cycloaddition reaction
- Reactions of anthracene

B.Pharm III SEMESTER EXAMINATION 2010-11

Course Code: BPH305

Paper ID: 0673111

Community Pharmacy

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Describe any **five** of the following (limit your answer in 50 words).
(3x5=15)
 - a) Material coding
 - b) Material stocking
 - c) EOQ
 - d) Prevention of communicable diseases
 - e) Patient information leaflet
 - f) Factors affecting patient compliance
 - g) Test for Serum Cholesterol and Total Cholesterol
 - h) Code of ethics
2. Explain in detail about the roles and responsibilities of pharmacist. (12)
3. Write notes on any **three**:
(4x3=12)
 - a) Lead time
 - b) Safety stocks.
 - c) Pharmaco-economics
 - d) Lung functions testing
4.
 - a) Discuss in detail about the strategies to overcome the barriers associated with patient information leaflets. (6)
 - b) Role of pharmacist in improving the patient compliance. (6)
5. What do you mean by the health screening services, discuss in detail with its importance? (12)

6. Write notes on: (4x3=12)
 - a) Precaution and care for Pregnant and Breast feeding women
 - b) Health promotion programmes
 - c) Maintenance of register under community pharmacy center
7. What is inventory control? Discuss in detail about the different method of inventory control. (12)
8.
 - a) Discuss in detail about the method for screening of blood sugar level. (6)
 - b) Discuss in brief about communication skills and need of good communication skill for patient counseling. (6)

B.PHARM. III SEMESTER EXAMINATION 2010-11

Course Code: BPH306

Paper ID: 0123112

Human Anatomy Physiology and Pathophysiology-III

Time: 3 Hours

Max. Marks: 75

Note: Attempt six questions in all. Q. No. 1 is compulsory.

1. Briefly describe any five of the following (limit your answer in 50 words). (3x5=15)
 - a) Large Intestine.
 - b) Peptic ulcer.
 - c) Liver.
 - d) Urinary tract infection.
 - e) Spermatogenesis.
 - f) Hormone.
 - g) Hepatitis.
 - h) Thyroid.
2. Draw a neat diagram of digestive system. Describe physiological role of stomach along with their secretions. (12)
3. Give pathology of following: (6x2=12)
 - a) Ulcerative Colitis.
 - b) Cirrhosis of liver.
4. Discuss physiology of urine formation with diagram. (12)
5. What do you understand by menstruation? Write pathophysiology of sexually transmitted disease. (12)
6. Describe various secretions of pituitary gland. Give functions of pituitary gland hormones. (12)

7. Explain following: (6x2=12)
 - a) Acid base balance.
 - b) Pancreatitis.

8. Write note on following: (6x2=12)
 - a) Amoebiasis
 - b) Diabetes Mellitus.