

B.Pharm FIRST SEMESTER EXAMINATION 2010-11

Course Code: BPB101

Paper ID: 0671101

Fundamental Biology

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) Tissue.
 - b) Animal kingdom
 - c) Plant kingdom
 - d) Transverse section of monocot leaf
 - e) Diagram of flower
 - f) Structure of amoeba
 - g) Diagram of plant cell
 - h) Difference between plant and animal cell
2. Give general structure and life history of following: (6x2=12)
 - a) House fly
 - b) Mosquito
3. What are meristematic tissues? Classify the meristematic tissue with the help of diagrams. (12)
4. Explain in detail about the monocot and dicot stem with help of diagrams. (12)
5. Draw a well labeled diagram of transverse section of monocot root and explain it. (12)
6. What is cell division? Explain Meiosis in detail with illustration. (12)

7. Write notes on any three: (4x3=12)
 - a) Xylem
 - b) Phloem
 - c) Bark
 - d) Bulb
 - e) Bud
8. Discuss the life cycle and structure of followings: (6x2=12)
 - a) Taenia solium
 - b) Amoeba

B.PHARM. I SEMESTER EXAMINATION 2010-11

Course Code: BPH101

Paper ID: 0123103

Pharmaceutical Analysis

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. Ionic product of water.
 - b. Indicator.
 - c. Iodometry and iodimetry.
 - d. Lewis acids and bases.
 - e. Accuracy and precision.
 - f. Law of mass action.
 - g. End point determination.
 - h. Titrant and titrate.
2. What do you mean by acid base titrations? State handerson hasselbanch equation in detail. (12)
3. What are the different fundamentals of volumetric analysis? Also explain primary and secondary standards with examples. (12)
4. Define precision? What is the significance of quantitative analysis in quality control. (12)
5. Write note on: (6x2=12)
 - a) Mohr's method.
 - b) Different techniques of pharmaceutical analysis
6. Give theory of redox titrations. Explain titrations involving potassium iodate and potassium bromated. (12)

7. What do you mean by precipitation Titrations? Discuss the effect of acids, temperature and solvent upon solubility of precipitate. (12)
8. Explain: (6x2=12)
 - a) Neutralisation curves.
 - b) Oxidation reduction curves.

B.Pharm I SEMESTER EXAMINATION 2010-11

Course Code: BPM101

Paper ID: 0671102

Remedial Mathematics

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) Solve $2 = \frac{y^2}{50}$

- b) Find the mode for the following individual series:
5, 7, 3, 5, 2, 1, 5, 8, 5.

- c) Without expanding the determinant, show that:

$$\begin{vmatrix} 0 & b & -c \\ -b & 0 & a \\ c & -a & 0 \end{vmatrix} = 0$$

- d) Find the equation of a line which makes an angle of $\tan^{-1}(3)$ with the x – axis and cuts off an intercepts of 4 units on negative direction of y – axis.

- e) Define rank correlation.

- f) Define measure of dispersion.

g) Evaluate $\lim_{x \rightarrow 2} \frac{x^2 - 4}{x + 3}$.

- h) Find the value of $\int e^{x+a} dx$.

2.

a) Solve $7^{x+1} + 7^{1-x} = 50$ (6)

b) Solve $\begin{vmatrix} x-2 & 2x-3 & 3x-4 \\ x-4 & 2x-9 & 3x-16 \\ x-8 & 2x-27 & 3x-64 \end{vmatrix} = 0$ (6)

3. The sum of three numbers is 6. If we multiply the third number by 2 and add the first number to the result, we get 7. By adding second and third numbers to three times the first number, we get 12. Using matrix find the numbers. (12)

4.

- a) Find the mode for the following distribution: (6)

Profit (,000 Rs.)	28	29	30	31	32	33
No. of Firms	4	7	10	6	2	1

- b) Obtain the median for the following frequency distributions: (6)

x:	1	2	3	4	5	6	7	8	9
f:	8	10	11	16	20	25	15	9	6

5.

- a) Complete the rank correlation coefficient for the following data: (6)

Person	A	B	C	D	E	F	G	H	I	J
Rank in Maths	9	10	6	5	7	2	4	8	1	3
Rank in Physics	1	2	3	4	5	6	7	8	9	10

- b) A random sample of 300 persons are classified as under: (6)

	Male	Female	Total
Smoker's	40	60	100
Non-smoker's	110	90	200
Total	150	150	300

Is there a relationship between health and smoking?

6.

- a) Find the equation of a line which passes through the point (22,-8) and is such that the intercept on x-axis exceeds the intercept on y-axis by 3. (6)

- b) Find the area of triangle whose vertices are (0,4), (6,5) and (2,0). (6)

7.

a) If $f(x) = x^3 - \frac{1}{x^3}$, show that

$$f(x) + f\left(\frac{1}{x}\right) = 0 \quad (6)$$

b) $\lim_{x \rightarrow 2} \frac{x^3 - 8}{x^2 - 4}$ (6)

8.

a) Evaluate $\int \frac{x^7 dx}{1+x^{16}}$ (6)

b) If $y = \log \log \log x^3$, find $\frac{dy}{dx}$ (6)

B.Pharm I SEMESTER EXAMINATION 2010-11

Course Code: BPH102

Paper ID: 0671104

Pharmaceutical Inorganic 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) Give the reaction involved for the limit test of sulphate.
 - b) Define Lewis acids.
 - c) Explain antiseptic action of hydrogen peroxide.
 - d) Explain the antibacterial action of silver nitrate.
 - e) Explain the antacid action of Aluminium hydroxide gel.
 - f) Give the antioxidant action of sodium metabisulfite.
 - g) Explain the antidote action of sodium thiosulfate in cyanide poisoning.
 - h) Give the properties of gamma particles.

2.
 - a) Discuss the sources of impurities in pharmaceuticals with suitable examples. (6)
 - b) Give the principle and methodology of limit test of iron. (6)

3. Define and classify topical agents with suitable examples. Give the preparation, chemical properties and mechanism of antimicrobial action of zinc oxide and boric acid. (12)

4. Write notes on: (6x2=12)
 - a) HSAB concept
 - b) Pharmaceutical acceptable glass

5. Define and classify gastrointestinal agents with suitable examples. Give the preparation, chemical properties and mechanism of action of magnesium hydroxide and disodium hydrogen phosphate. (12)

6. Write notes on: (6x2=12)
 - a) Dentifrices
 - b) Expectorants

7. What are major intra and extra-cellular electrolytes? Explain with suitable examples. Discuss the physiological role of calcium phosphate and chloride. (12)

8. Write notes on: (6x2=12)
 - a) Iron and haematinics
 - b) Clinical applications of radio-pharmaceuticals.

B.PHARM. I SEMESTER EXAMINATION 2010-11

Course Code: BPH103

Paper ID: 0123105

Pharmaceutics-I (General Pharmacy)

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) Proof Spirit.
 - b) Decoction.
 - c) Simple syrup IP.
 - d) Co-Solvents.
 - e) Principle of size reduction.
 - f) Anti oxidants.
 - g) Aromatic water.
 - h) Maceration.
2. Define "Posology". How will you calculate the doses for infants? (12)
3. What is "extraction"? Describe the various processes employed for drug extraction. Discuss the various factors affecting the selection of a extraction process. (12)
4. Explain the theoretical aspects of mixing. Describe in details the various equipments employed for mixing. (12)
5. Describe any three: (4x3=12)
 - a) Liniments and Lotions.
 - b) Mucilages.
 - c) Mouthwashes.
 - d) Glycerine.

6. Describe the factors affecting size reduction. Describe the various equipments employed for size-reduction. (12)
7. Explain the scope of pharmacy profession. Give a detailed account of origin and development of pharmacy profession in India. (12)
8.
 - a) What is size separation? Classify various equipments employed for size separation. (6)
 - b) Give a detailed account of "Trommel" used for size separation. (6)

B.Pharm I SEMESTER EXAMINATION 2010-11

Course Code: BPH104

Paper ID: 0671106

Human Anatomy, Physiology and Pathophysiology – I

Time: 3 Hours

Max. Marks: 75

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

1. Define any five of the following (limit your answer in 50 words).
(3x5=15)
 - a) Neuron
 - b) Cell
 - c) Joint
 - d) Metabolism
 - e) Disease
 - f) Anatomy
 - g) Passive transport
 - h) Erythropoiesis
2. Draw a neat diagram of human cell. Discuss in detail about active transport. (12)
3. Classify epithelial tissue. Write structure and function of epithelial tissue. (12)
4. Discuss functions and composition of human skeleton. (12)
5. Write important neurotransmitter of human body. Describe role of neurotransmitter with examples. (12)
6. What do you understand by blood group? Give significance of blood group. (12)
7. How a disease can be prevented? Explain with examples. (12)
8. Explain following: (6x2=12)
 - a) Health.
 - b) Muscle tone.

B.PHARM. I SEMESTER EXAMINATION 2010-11

Course Code: BPH105

Paper ID: 0123107

Foundation English-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) What is demonstrative pronoun? Give two examples.
- b) What is a noun? How many kinds of nouns are there.
- c) Define prefix. Give two examples.
- d) Give examples of two homophones, and two homonyms.
- e) Define communication.
- f) What do you understand by squinting construction?
- g) Give the antonym of the following words:
 - i) Agree
 - ii) Arrival
- h) Give the synonym of the following words:
 - i) Conceal
 - ii) Trust
 - iii) Aid

2. Write short note on any one of the following: (12)

- a) Expletives
- b) Loaded sentences
- c) Garbled sentences.

3. What are the distinguishing features of a good sentence? (12)

4. What are the essential features of Gandhian outlook? (12)

5. Why is Priestley deliberately simple in his writing? (12)

6. Write a note on the barriers to effective communication. (12)

7. How could a reader of a book gain maximum possible value from his reading of a book, as suggested by Virginia Woolf? Describe precisely. (12)

8. What are the elements of human communication? (12)