

Registration No:

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B.Pharma BP101T

1st Semester Regular/Back Examination 2019-20
HUMAN ANATOMY AND PHYSIOLOGY I
BRANCH : B.Pharma
Max Marks: 75
Time : 3 Hours
Q.CODE : HRB559

Answer Question No.1 (Part-A) and 02 (Part-B) which are compulsory and any TWO from Part-C.

The figures in the right hand margin indicate marks.

Part-A

Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)

- a) Define homeostasis with an example.
b) Write the structure and functions of plasma membrane.
c) Write different types of WBC and their functions.
d) What is cardiac output?
e) What are the antigens and antibodies present in A+ blood group?
f) What is Electrocardiogram?
g) What is hypertension?
h) Define pronation and supination?
i) What is erythropoiesis?
j) Name the neurotransmitters released from preganglionic and postganglionic sympathetic nerve endings.

Part-B

Q2 Only Focused-Short Answer Type Questions- (Answer Any FIVE out of SEVEN) (5 x 7)

- a) Define and classify tissue. Write detail notes on epithelial tissue.
b) Write the principles of cell communication.
c) Write the structure and functions of skin.
d) Discuss in details about the neuromuscular junction.
e) Classify different types of bone joint. Explain briefly on synovial joints.
f) Write notes on cardiac cycle?
g) Write the origin and functions of cranial nerves.
h) Write the detail mechanisms of blood coagulation.
i) Write the structure and functions of human eye.

Part-C

Q3 Only Long Answer Type Questions (Answer Any TWO out of FOUR)
Discuss the human cell with neat and labeled diagram. Explain briefly the structure and functions of different cell organelles. (10)

Q4 With neat and labeled diagram describe the anatomy and physiology of human heart. Write notes on cardiac output. (10)

Q5 Define lymph. Write detail about lymphatic system. Add a note on the functions of spleen. (10)

Q6 Write the classification and functions of peripheral nervous system. Discuss about sympathetic and parasympathetic nervous system. (10)

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B.Pharm  
BP102T

**1<sup>st</sup> Semester Regular/Back Examination 2019-20**  
**PHARMACEUTICAL ANALYSIS I**  
**BRANCH : B.Pharma**  
**Max Marks: 75**  
**Time : 3 Hours**  
**Q.CODE : HRB628**

**Answer Question No.1 (Part-A) and 02 (Part-B) which are compulsory and any TWO from Part-C.**

The figures in the right hand margin indicate marks.

**Part-A**

**Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)**

- a) State Acid and Base according to Bronsted-Lowry Theorem with examples.
- b) Why nitrobenzene is used in precipitation titration?
- c) Define titrant and titrand.
- d) What is self indicator? Give an example of it.
- e) Give examples of masking and demasking agent.
- f) Differentiate between qualitative and quantitative analysis.
- g) State Equivalent conductivity.
- h) Why acetic anhydride is used for preparation of 0.1N perchloric acid?
- i) Calculate the pH of 100 ml of 0.1 N Hydrochloric acid.
- j) How to calculate percentage of analyte in gravimetric analysis.

**Part-B**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any SEVEN out of NINE) (7 x 5)**

- a) Illustrate iodimetric titration for iodine.
- b) Prepare and standardize 0.1 N Sodium Hydroxide solution.
- c) Explain Ostwald theory of acidic and basic indicators.
- d) Discuss different types solvents used in Non-aqueous titration.
- e) Write principle and applications of Diazotization titration.
- f) Describe the principle behind Mohr's method of precipitation titration.
- g) Explain the various types of EDTA titrations.
- h) Give the design and working of glass electrode.
- i) Write in brief about limit test for chlorides.

**Part-C**

**Q3 Only Long Answer Type Questions (Answer Any TWO out of FOUR)**

Define Errors. Classify it. Discuss the methods to minimize the error. **(10)**

**Q4** Discuss the different types of conductometric titrations involved in pharmaceutical analysis. Mention its advantages and disadvantages. **(10)**

**Q5** Explain the construction and working of dropping mercury electrode with neat labeled diagram. **(10)**

**Q6** Describe the neutralization curve of Strong acid when titrated against strong base. Mention its significance. **(10)**

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B.Pharm  
BP103T

**1<sup>st</sup> Semester Regular/Back Examination 2019-20**  
**PHARMACEUTICS-I**  
**BRANCH : B.Pharma**  
**Max Marks: 75**  
**Time : 3 Hours**  
**Q.CODE : HRB707**

**Answer Question No.1 (Part-A) and 02 (Part-B) which are compulsory and any TWO from Part-C.**

The figures in the right hand margin indicate marks.

**Part-A**

**Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)**

- a) How you can calculate child dose according to dilling's formula?
- b) Why clicking sound is found in emulsion preparation?
- c) Name the two reasons responsible for physical incompatibility.
- d) Write down the composition of flexible collodions.
- e) Convert 50% alcoholic preparation to proof spirit.
- f) Name the emulsion identification tests.
- g) What is tablet triturate?
- h) Why tetracycline is not taken with milk for therapeutic use?
- i) Give two examples of preservatives mostly used in suspension.
- j) What is compound tragacanth?

**Part-B**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any SEVEN out of NINE) (7 x 5)**

- a) Explain the various solubility enhancement techniques
- b) Discuss the stability problems of emulsion
- c) Illustrate the evaluation of Ointment.
- d) Differentiate between suspension and emulsion
- e) Draw a typical format of prescription and mention the importance of its each part
- f) Calculate the quantity of 40% v/v and 70% v/v alcohol are required to make 200 ml of 50% v/v alcohol.
- g) Differentiate between Ointment and Cream
- h) Discuss the formulation procedure of the elixir
- i) 15 kg weighing child of 5 years age is to be treated with paracetamol whose adult dose is 500mg, then what will be the child dose? Compare the results obtained from two different formulae.

**Part-C**

**Q3 Only Long Answer Type Questions (Answer Any TWO out of FOUR)**

- Q3** What is posology? Mention various factors affecting dose calculation. **(10)**
- Q4** Classify 'Incompatibility'? Discuss different types of 'chemical Incompatibility' with remedy. **(10)**
- Q5** What are semisolid dosage forms? Write in detail about Suppositories. **(10)**
- Q6** Define powder, classify it and briefly discuss it. **(10)**

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B.Pharm  
BP104T

1<sup>st</sup> Semester Regular/Back Examination 2019-20  
**PHARMACEUTICAL INORGANIC CHEMISTRY**

BRANCH : B.Pharma

Max Marks: 75

Time : 3 Hours

Q.CODE : HRB771

Answer Question No.1 (Part-A) and 02 (Part-B) which are compulsory and any TWO from Part-C.

The figures in the right hand margin indicate marks.

**Part-A**

**Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)**

- Why 20% citric acid is added in limit test for iron?
- What is blue vitriol? Write its formula and uses.
- Mention the methods used for adjusting isotonicity.
- Define anti-microbial agents with suitable examples.
- What is universal Antidote? Give its formula.
- Define haematinics. Name the official compounds of iron used as haematinics.
- What is lugol's solution? Mention its uses.
- Mention the effects of impurities in pharmaceutical substances.
- Name the techniques used for the measurement of radioactivity.
- What is half life of a radioactive material? Mention its significance.

**Part-B**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any SEVEN out of NINE) (7 x 5)**

- Discuss about the different sources of impurities found in pharmaceutical substances.
- Mention the ideal characteristics of antacids. Write down the monograph of Aluminum hydroxide gel.
- Define expectorants. Mention its mechanism of action. Write down the monograph of any one inorganic expectorant.
- Classify dental product with suitable examples. Write down the monograph of Sodium Fluoride.
- Write a note on emetics.
- Give the preparation, properties and uses of Hydrogen peroxide and Silver nitrate.
- Write the assay of Sodium chloride and Copper sulphate.
- Mention the sources, deficiency condition, and toxicity of iron in the body. Write the preparation and properties Ferrous sulphate.
- Define expectorants. Give the mechanism of action of expectorants. Write down the monograph of Ammonium chloride.

**Part-C**

**Q3 Only Long Answer Type Questions (Answer Any TWO out of FOUR) (10)**

- Describe in detail the limit test for arsenic with a neat labeled diagram. (10)
- Define and classify astringents with examples. Mention their Mechanism of action. Write the preparation, properties of Potash Alum. (10)
- Describe the construction and working of G-M counter. Discuss important applications of radio pharmaceuticals. (10)
- Define antidotes. Classify antidotes basing upon their mechanism of actions. Explain, how cyanide poison affects the body and how it can treated? (10)

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According to PCI Syllabus

**B.Pharm**  
**BP105T**

**First Semester Regular Examination 2019-20**

**(Non University Examination as per Pharmacy Council of India (PCI) Guideline 2017-18)**

**SUB: COMMUNICATION SKILLS**

**BRANCH: B.PHARM**

**Time: 1½ Hours**

**Max Marks: 35**

**QUESTION CODE: NUE1901**

**Answer any one from the Part-A and any five from the Part-B.**

**The figures in the right hand margin indicate marks.**

**Part-A** (Write in about 150 words)

Q.1. What are different barriers to communication and how will you eliminate them?

(10)

Q.2. What do you mean by group discussion (GD) concept and why it is so important before selecting a student in any academia or organization?

(10)

**Part-B** (Write in about 75 words)

Q.3. Why interview process is so important for the students?

(05)

Q.4. How English communication skill is important now a days?

(05)

Q.5. What is communication? Explain the importance of communications in detail.

(05)

Q.6. Explain, channels of communication with suitable examples.

(05)

Q.7. How is speech more effective than writing?

(05)

Q.8. Write the methods of communication.

(05)

Q.9. Differentiate between general communication and professional communication.

(05)

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According to PCI Syllabus

**B.Pharm**  
**BP106RBT**

**First Semester Regular Examination 2019-20**

**(Non University Examination as per Pharmacy Council of India (PCI) Guideline 2017-18)**

**SUB: REMEDIAL BIOLOGY**

**BRANCH: B.PHARM**

**Time: 1½ Hours**

**Max Marks: 35**

**QUESTION CODE: NUE1902**

**Answer any one from the Part-A and any five from the Part-B.**

**The figures in the right hand margin indicate marks.**

**Part-A**

Q.1. Define nomenclature. Write a note on advantages and disadvantages of different types of nomenclature. (10)

Q.2. Diagrammatically show the different parts of Nephron, write a notes on production of urine. (10)

**Part-B Write short note:**

Q.3. Respiratory volumes (05)

Q.4. Production of HCl in stomach (05)

Q.5. Structure and functions of larynx (05)

Q.6. Anatomical characters of Dicot stem (05)

Q.7. Cell cycle (05)

Q.8. Digestion of carbohydrate (05)

Q.9. Structure and functions of large intestine (05)

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According to PCI Syllabus

**B.Pharm**  
**BP106RMT**

**First Semester Regular Examination 2019-20**

**(Non University Examination as per Pharmacy Council of India (PCI) Guideline 2017-18)**

**SUB: REMEDIAL MATHEMATICS**

**BRANCH: B.PHARM**

**Time: 1½ Hours**

**Max Marks: 35**

**QUESTION CODE: NUE1903**

**Answer any one from the Part-A and any five from the Part-B.**

**The figures in the right hand margin indicate marks.**

**Part-A**

Q.1. Solve the following.

$$x + y + z = 3$$

$$2x - y + z = 2$$

$$x - 2y + 3z = 2$$

(10)

Q.2. Prove that  $\begin{vmatrix} 1 & a & a^2 \\ 1 & b & b^2 \\ 1 & c & c^2 \end{vmatrix} = (a - b)(b - c)(c - a)$

(10)

**Part-B**

Q.3. Find  $\lim_{x \rightarrow 2} \frac{\frac{1}{x^3} - \frac{1}{8}}{x - 2}$ .

(05)

Q.4. Find laplace transform of  $\sin mt$  i.e  $L[\sin mt]$ .

(05)

Q.5. Find the equation of the straight line passing through (-1, -5) and perpendicular to the line

$$2x + 3y - 5 = 0.$$

(05)

Q.6. If  $y = \sin^3 \sqrt{x}$ , find  $\frac{dy}{dx}$ .

(05)

Q.7. Solve:  $(xy - x)dx + y(x + 1)dy = 0$ .

(05)

Q.8. Find the maxima and minima of  $f(x) = 2x^3 - 3x^2 - 36x + 10$ .

(05)

Q.9. Solve by cramer's rule  $5x + 3y = 1, 2x + 3y = -1$ .

(05)

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B.Pharm  
15PH1021<sup>st</sup> Semester Back Examination 2019-20

## INORGANIC PHARM CHEMISTRY

BRANCH : B.PHARMA

Max Marks : 100

Time : 3 Hours

Q.CODE : HB627

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

## Part-I

**Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)**

- What is calamine? Give its uses.
- Define universal Antidote? Give the formula.
- Mention the units of radio activity.
- Explain the role of thioglycollic acid in the limit test of iron.
- Write any two effects of impurities in pharmaceutical substances.
- Mention the storage and uses of laughing gas.
- Why dilute HCl is used in the limit test for sulphate?
- What is barium meal? Give its use.
- Why ammonia and potassium cyanide are used in the limit test for heavy metals?
- Define buffer capacity and composition of buffer solution.

## Part-II

**Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) (6 x 8)**

- Write a note on various types of water listed in I.P.
- Classify topical agents with suitable examples. Mention different actions of astringents.
- Write the principle of limit test for Iron.
- Define expectorants. Give the mechanism of action of expectorants. Write down the monograph of any one inorganic expectorant.
- Write down the application of buffers in pharmacy.
- Illustrate notes on Iodine and its preparation.
- Give notes on pharmaceutical aids used in pharmaceutical industry.
- Classify cathartics basing on their mechanism of action with suitable examples.
- Write down the monograph silver nitrite & hydrogen peroxide.
- Define cough? Explain the mode of action of Emetics.
- Define haematinics. Write down the monograph of Ferrous sulphate.
- Write down different theories of acid and base with examples.

## Part-III

**Q3 Only Long Answer Type Questions (Answer Any Two out of Four)**

- Q3** What is an antacid? Classify it. Write down the ideal characteristics of an antacid. Write the monograph of any two antacid. **(16)**
- Q4** Explain in details about the physiological acid base balance & the electrolytes used for replacement therapy. Write the role of Oxygen in biological system. **(16)**
- Q5** Describe various effects of impurities. Discuss in detail the limit test for arsenic with a neat labelled diagram. **(16)**
- Q6** Define the term Abrasive and Dentifrice. Classify the dental product with suitable examples. Write down the monograph of Sodium Fluoride and Strontium Chloride. Describe the role of fluorides in dental care. **(16)**



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**B.Pharm  
15PH104**

**1<sup>st</sup> Semester Back Examination 2019-20**

**COMMUNICATIVE ENGLISH**

**BRANCH : B.Pharma**

**Max Marks : 100**

**Time : 3 Hours**

**Q.CODE : HB853**

**Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.**

**The figures in the right hand margin indicate marks.**

**Part-I**

**Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)**

- a) State what is the last step in a single cycle of communication?
- b) What is the regional variety of a language called in English?
- c) Define the term "filtering" as found in communication.
- d) Write the IPA symbol for the sound heard at the beginning of the word "Chat"
- e) Define a transitive verb with an example.
- f) What do you mean by decoding?
- g) Which form of the verb is used to refer to Past happening-related to-Present time?
- h) Define what is nucleus in tone of voice.
- i) In a sentence "He would wait for me for hours", what meaning does "would" express?
- j) Write the phonetic transcription of the weak form of the word "to".

**Part-II**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) (6 x 8)**

- a) What is face-to-face communication? Justify why it is important.
- b) How is a vowel sound different from a consonant sound? Make a list of all short vowels using IPA symbols with examples in words
- c) What is Phonemic transcription? Transcribe the following words phonetically--- Thank,people,world,about,judge,computer
- d) There is no one-to-one correspondence between time and tense in English. Explain with examples.
- e) Some verbs are normally not used in progressive forms. What are these verbs called? Make a list of such verbs and use some of them in sentences.
- f) What is a conditional sentence? Explain different types of conditional sentences with examples.
- g) What is stress? Analyze stress variation with examples.
- h) What is a modal verb? Discuss with illustration the meanings expressed by different modals.
- i) Analyzing the Purpose and Audience before a communication helps getting effective results. Explain.
- j) Explain contrastive stress and its features with examples.
- k) Distinguish and briefly elaborate the characters of Oral and written communication.
- l) Explain the features of technical communication that make it different from general communication

**Part-III**

**Only Long Answer Type Questions (Answer Any Two out of Four)**

**Q3** What is IPA in English Pronunciation? Discuss in details the guidelines set for English pronunciation using the IPA symbols with examples. **(16)**

**Q4** The attitudes and feelings of the speakers are attached to the way intonation is used. Explain with examples to justify this. Discuss the uses of Falling tone and Rising tone intonation. **(16)**

**Q5** Define communication. Discuss in details the features of Body Language in effective communication. **(16)**

**Q6** Discuss the barriers to communication and the ways to deal with such barriers. **(16)**

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**B.Pharm  
PH.1.7**

**1<sup>st</sup> Semester Back Examination 2019-20**  
**PHARM. CHEMISTRY - I (INORGANIC)**  
**BRANCH : B.Pharma**  
**Time : 3 Hours**  
**Max Marks : 70**  
**Q.CODE : HB629**

**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 are antioxidants? Give two examples.
- b) Why potassium iodide is used in preparation of iodine solution?
- c) Explain universal antidote.
- d) Mention the storage and uses of Laughing gas.
- e) State pharmaceutical aids? Give two examples of it.
- f) Define astringent.
- g) Give the composition of ORS.
- h) What do you mean by physiological acid base balance?
- i) Define buffer action and buffer capacity.
- j) Write down the principle involved in limit test for chloride.

**Q2 a) Write the monograph of Magnesium sulphate. (5)**  
**b) Define Antiseptics and disinfectants. Classify them according to their mechanism of action. (5)**

**Q3 a) What precautions are to be taken during handling of radiopharmaceuticals? (5)**  
**b) Give a note on role of iodine in human body. (5)**

**Q4 Discuss in detail the different sources of impurities found in pharmaceutical substances. (10)**

**Q5 a) Write down the preparation, properties and uses of any two inorganic antacids. (5)**  
**b) What are topical agents? Classify it. Write down the mechanism of action of antimicrobial agents. (5)**

**Q6 a) Discuss about G.M. counter. (5)**  
**b) Write down the monograph of Alum and Silver Nitrate. (5)**

**Q7 Explain in detail the limit test of Arsenic along with a neat and labelled diagram. (10)**

**Q8 Write short Notes on any TWO : (5 x 2)**

- a) Irritant Purgatives.
- b) Limit Test of Chloride.
- c) Expectorant
- d) Concepts of acids and bases.