EAST POINT COLLEGE OF PHARMACY
East Point Campus, Jnana Prabha, Virgo Nagar Post,
Bengaluru – 560049, Karnataka

QUESTION BANK

B Pharmacy

Semester-I

EAST POINT COLLEGE OF PHARMACY
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Human Anatomy and Physiology-1

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LONG ESSAY 10 MARKS

1. Draw a neat labeled diagram of the brain. Write two functions of each part of the brain.
2. Explain in detail the mechanism of respiration.
3. Mention the hormones of the pituitary gland and write their function.
4. Draw a neat labeled diagram of the brain and write the functions of the cerebrum and cerebellum.
5. A neat labeled diagram explains the anatomy and physiology of the lungs.
6. A) Explain the hormones of the posterior pituitary gland.
   B) What is insulin? Explain its role in the regulation of blood sugar levels.
7. Explain the functions of the hypothalamus and medulla oblongata.
8. Explain the physiology and regulation of respiration.
9. Describe the anatomy of the pituitary gland and explain its hormones with a negative and positive feedback mechanism
10. Draw a neat labeled diagram of the brain. Write two functions of each part of the brain.
11. A neat labelled diagram describes the structure of the nephron. Explain the physiology of urine formation.
12. Explain the anatomy and physiology of the adrenal gland.
13. Explain the structure and functions of the kidney, with a mechanism of urine formation.
14. Explain the biosynthesis and functions of thyroid hormones.
15. Explain the structure and functions of the kidney, with the mechanism of urine
16. Explain in detail the different functional areas of the cerebrum with their functions.
17. Explain the anatomical features of the sympathetic and parasympathetic nervous system
18. Explain the hormones of the pituitary gland, and write their function.

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SHORT ESSAY 5 MARKS

1. Classify the nervous system. Explain the functional areas of the cerebrum
2. Write the anatomy and physiology of the stomach.
3. Explain the physiology of urine formation.
4. Explain the biosynthesis and functions of thyroid hormone
5. Explain the structure and functions of testes
6. Mention the salivary glands. Write the composition and functions of saliva
7. Explain transport of respiratory gases
8. Anatomy and physiology of mammary glands.
9. Explain Oogenesis
10. Mention the functions of thalamus and hypothalamus
11. Write the anatomy and physiology of liver.
12. Write the physiology of urine formation.
13. Explain the regulation of respiration
14. Explain the functions of adrenal cortex hormones
15. Write the physiology of menstrual cycle
16. Explain spermatogenesis
17. Explain Movements of the small intestine
18. What is parturition? Explain the stages of parturition
19. Describe the anatomy of spinal cord
20. Explain digestion and absorption of carbohydrates, proteins and fats
21. Describe nephron with neatl abeled diagram
22. Define-Cushing's syndrome, Addison's disease, Acromegaly, Pheochromo cystoma, Diabetes insipidus
23. Explain the formation and role of ATP
24. Define lung volume and capacities along with normal values
25. Explain the organs and functions of the male reproduction system
26. Explain the stages of pregnancy
27. Describes permatogenesis.

28. Describe the composition and functions of cerebrospinal fluid
29. Explain the structure and functions of thymus gland
30. Describe the exocrine secretions of pancreas
31. Explain transport of oxygen and carbon dioxide
32. Explainthefunctionsofanteriorpituitaryhormones
33. Explain salivary glands, describe the composition and functions of saliva
34. What is insulin? Explain its role in the regulation of blood sugar level.
35. Describe the functions of liver.
36. With a neat labeled diagram. Explain anatomy of lungs
37. Describe the functions of medulla oblongata and pons
38. Explain the function sof liver
39. Explain the events of Menstrual cycle
40. Explain in detail about renin angiotensin system
41. Explain the phases of gastric acid secretion.
42. Explain with neat labeled diagram explain respiratory tract
43. Explain layers of GIT
44. Explain the structure and functions of the parathyroid gland
45. Explain the structure and functions of the ovary
46. Explain nerve plexus
47. Explain endocrine secretions of the pancreas and their functions
48. Explain the digestion of carbohydrate, protein, and fats at different levels
49. Explain Regulation of respiration
50. Explain the role of the renin-angiotensin system in the regulation of blood pressure
51. Explain the anatomy and functions of the liver.
52. Explain the genetic pattern of inheritance
53. List out the organs of the female reproductive system and explain the uterus.
54. What is parturition? Explain the stages of parturition

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SHORT ANSWERS 2 MARKS

1. Write on Meninges.
2. Define-Micturition
3. Define-Acromegaly, Cretinism
4. What are the ventricles of the brain
5. Define peptic ulcer
6. Define Gigantism and Dwarfism.
7. Write the divisions of the nervous system
8. Define polycystic ovarian disease
9. Define anorexia and GRD
10. Mention the functions of testes
11. Mention types of reflexes
12. Write the functions of saliva
13. Define Tidal volume and Vital capacity
14. Write the functions of the thymus gland Book
15. Write the functions of gastric juice
16. Write the functions of cerebrospinal fluid
17. Define infertility, Polycystic ovarian disease
18. Define photochrom, cystoma, diabetes insipidus
19. Mention the functions of ovaries
20. Write the divisions of the nervous system
21. Write the functions of the thymus gland/ medulla oblongata.
22. Define constipation and diarrhoea
23. Mention the different methods of artificial respiration
24. List the functions of the cerebellum
25. Mention the functions of the pineal gland
26. Explain the genetic pattern of inheritance
27. Define reflex arc
28. Composition and functions of bile.
29. Define parturition.
30. Mention the layers of GIT3

31. Define synapse
32. Define reflex arc
33. Define anorexia and peptic ulcer
34. Describe layers of the brain
35. Explain hyperthyroid and hypothyroidism
36. Name the ducts of the male reproductive system from proximal to distal end
37. Write the functions of oxytocin
38. Mention the functions of the ovary
39. Write the difference between somatic and autonomic nervous system
40. Write the functions of the thalamus
41. Define internal and external respiration
42. Explain the Extrapyramidal tract
43. Differentiate between diabetes and diabetes mellitus
44. Define afferent and efferent nerves
45. Write the functions of the pineal gland
46. Define the terms liver cirrhosis and hepatitis
47. Write the structure and functions and sperm
48. Write about the movement of the large intestine
49. Explain seminiferous tubules
50. Define action potential and synapse
51. Define gastritis and hepatitis
52. Define anorexia and pancreatitis
55. Explain chloride shift
56. Write a note on gonads.
57. Write functions of the hypothalamus on come,
58. Define dwarfism and gigantism
59. Draw a neat, labelled diagram of the neuron and label it.
60. Name the ducts of the male reproductive system from proximal to distal end
61. Write about hormones of the male and female reproductive system

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Pharmaceutical Analysis I

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LONG ESSAY (10 Marks)

1. Define and classify errors? Describe the various methods to minimize the errors.
2. What is acid-base titration? Explain the Neutralisation curve in acid-base titration.
3. Discuss iodometry and lodimetry titrations briefly with examples.
4. What are different methods of expressing concentration? How do you prepare and standardize a) 250ml of 0.1M sulphuric acid solution b) 500ml of 0.5N potassium permanganate solution.
5. What are non aqueous titrations? Explain in detail the types of solvents used in non-aqueous titrations. Write the assay of Sodium Benzoate.
6. Explain the basic principles involved in redox titrations? Give the applications of titration with Potassium iodate.
7. What are primary and secondary standards? Give examples of primary standards used in different types of titrations. Enlist the ideal properties of the primary standard.
8. Explain the procedure for the selection of indicators in the titration between a strong acid and strong base using neutralization curves.
9. Define oxidation and reduction. Give the applications of cerrimetry with suitable examples.
10. Define and classify determinate errors with examples. List the methods of minimizing errors.
11. Classify acid-base titrations. Explain the Quinonoid theory of indicators with example.
12. Define oxidizing and reducing agents with suitable examples. Explain the principle involved in the iodometric titrations.
13. What are errors and classify them? Defíne accuracy and precision. Describe the steps to minimize errors.
14. What are Neutralization curves? Explain the selection of indicators in the titration between weak acid with the strong base using neutralization curves.
15. Define oxidation and reduction. Explain the principle involved in titration with potassium dichromate. Give its applications with suitable examples.
16. Write short notes on a) primary standards and secondary standards. b) minimization of errors.

17. What are Neutralization curves? Explain the selection of indicators in the titration between the weak base with strong acid using neutralization curves.
18. Classify redox titrations. Give the applications of cerimetry and bromatometry.

SHORT ESSAY(05 Marks)

1. What are the primary and secondary standards? Give the ideal requirements of a primary standard.
2. How do you calculate the equivalent weight and molecular weight of a substance. Give exanmples.
3. Write the principle and procedure of Non-aqueous titration involving halogenate salt of weak bases.
4. Explain the mechanism of action of indicators in Fajan's method.
5. Define and classify ligands with examples.
6. Give the application of the Gravimetrie technique in the quantitative determination of barium as Barium sulphate.
7. Explain the conductometric titration curves for strong acid with a weak base.
8. Write the construction and working of Glass electrodes with advantages and disadvantages.
9. What type of compounds can be considered as primary standards and why? Give suitable examples.
10. Explain the principle involved in the estimation of a mixture of strong acids. weak acid against a strong base.
11. How do you prepare and standardize 0.1N perchloric acid solution?
12. Classify the various EDTA titrations and explain each one in detail.
13. What is precipitation titration and give the principle involved in the assay of Sodium Chloride.
14. Why Gravimetric estimation is preferred for a certain types of compounds. Give the principle involved in the Barium Sulphate estimation.
14. Define Specific conductance and Molar conductance. Draw the schematic diagram of conductometric instrumental assembly.
15. Explain the different steps involved in locating the endpoint in Potentiometric titrations.

16. What is a polarographic curve? T low it is plotted? Mention different areas in the polarographic curves.
17. Write the equation involved in the titration of iodine and sodium thiosulphate solutions. And explain the reactants and products.
18. Explain the theory of acid-base indicators in detail.
19. What is leveling effect in non aqueous titrimetric. Explain in detail.
20. Discuss the principle and applications of Argentometric titrations with Example.
22. Explain the principle involved in the Complexometric titrations in detail and how ill you estimate Magnesium Sulphate.
23. What is meant by Gravimetrie analysis? Describe the techniques used for the successful estimation of Barium.
24. Explain the Conductometric titration curve ofa mixture of weak and strong acids with strong alkali.
25. What are the reference and indicator electrodes used in potentiometrie titrations? Explain construction and working of any one electrode.
26. Write the principle and applications of Polarographic analysis. .5, and
27. How do you prepare and standardize the following compounds a) 500ml of 0.1N hydrochloric acid b) 250ml of 0.1N sodium hydroxide.
28. What is the usefulness of mixed and universal indicators.
29. Explain the uses of the following in non aqueous titrations a) perchloric acid b) acetic acid c) acetic anhydride d) crystal violet.
30. Explain the principle and procedure involved in the Volhards method and modified Volhards method.
31. Explain the principle and procedure involved in the estimation of Calcium Gluconate.
32. Explain what is co-precipitation and post-precipitation with examples.
33. Explain the titrimetric curves obtained in conductometric titration a) strong acid Vs weak base b) strong base Vs strong acid.
34. Explain the construction and working of the glass electrodes. What are the advantages of the glass electrode?

35. Give the construction and working of DME.
36. What is pharmaceutical analysis? Explain different types of analysis. What is its scope in pharmacy?
37. What are indicators? Explain the theory of indicators used in acid-base titrations
38. Explain the reason why water is not used in non-aqueous titration.
39. Give the mechanism of action of adsorption indicators with suitable examples.
40. Classify complexometric titrations. Explain each type with suitable examples.
41. What is gravimetry? Explain the following terms a) Digestion b) ignition c)Ash treatment d) Inceneration.
42. Write the principle, instrumentation, and applications of conductometry.
43. Enumerate the various types of electrodes in potentiometry. Give the working of the Calomel electrode.
44. What is polarography? Explain the terms a) limiting current b) polarographic maxima c) diffusion current d) supporting electrolytes.
45. What is standardization? What type of substances should be standardised?
46. How do you prepare 200ml of 0.5 N Oxalic acid solution?
47. Briefly explain the different theories of indicators.
48. What is non-aqueous titration? Give the principle and procedure involved in the estimation of Ephedrine Hydrochloride.
49. Classify precipitation titration with examples. Explain Mohr's method in detail.
50. Write a note on buffers used in the complexometric titration.
51. Write a note on the washing of precipitate in gravimetric analysis.
52. Write the construction and working of the conductivity cell.
53. Explain the principle involved in potentiometric titration. Give the construction, working, advantages, and disadvantages of glass electrodes.
54. Give the construction, working, and applications of rotating platinum electrodes.

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SHORT ANSWERS(02 Marks Questions)

1. Explain the importance of significant figures.
2. What is back titration? Give example.
3. What is redox potential?
4. What are acid-base indicators? give examples.
5. What are leveling and differentiating effects?
6. What are Masking and Demasking Agents?
7. Define co-precipitation and post-precipitation.
8. What are self-indicators? Give examples.
9. Define Molar conductance and Specific conductance.
10. Define the terms Normality, Molarity.
11. Define accuracy and precision.
12. Give two examples for redox indicators.
13. Define Neutralisation curve. Give its importance.
14. What are Aprotic solvents? Give example.
15. Name two compounds estimated by gravimetry.
16. Give the formula to calculate the equivalents in redox titration.
17. Give the difference between iodometry and iodimetry.
18. Give the units for conductance and resistance.
19. Give one example each for indicator electrode and reference electrode.
20. What are chelating agents? Give examples
21. What is the importance of the common ion effect in gravimetry .Define oxidation and reduction for example.
22. What is a conductivity cell.
23. Write the differences between conductometry and potentiometry.
24. What are atomic mass and molecular mass?
25. Give an example of personal error and operative error.
26. Give one example each for self indicator and internal indicator.
27. How do you determine the endpoint in acid-base titrations
28. Name some indicators used in non-aqueous titrations.

29. What are sequestering agents? Give examples.
30. Why ignition process is carried out in gravimetry.
31. Calculate the equivalent weight of Potassium Permanganate and lodine.
32. Define conductance and resistance
33. What is Null point potentiometry?
34. Give the pH range of phenolphthalein and methyl orange indicators.
35. Give the role of starch as an indicator in redox titrations.
36. Give a list of methods of expressing concentration.
37. How do you calculate stoichiometric endpoints in acid-base titrations?
38. Name the solvents used in non-aqueous titrations.
39. What is the difference between chelates and the complexes?
40. List the optimum conditions for precipitation in gravimetric analysis.
41. Calculate the equivalent weight of Hydrogen peroxide and Oxalic acid.
42. Name two compounds that can be estimated by conductometry.
43. Write the importance of the Nernst equation.
44. What are systematic errors and random errors? Give examples.
45. What is the color change interval of an acid-base indicator? Give its importance.
46. How do you prepare acetous Perchloric Acid?
47. Complete and balance the equations KMnO4+H2S04
48. What is a masking agent? Give example for masking by precipitation.
49. Write the conditions for the process of digestion in Gravimetry.
50. What are Specific conductance and Molar conductance?
51. What is a standard hydrogen electrode?
52. Define Qualitative Analysis and Quantitative Analysis.
53. What is Cerimetry? Give its applications.
54. Differentiate between the molar and normal solutions? What data is required to prepare these solutions.
55. Write about a) instrumental error b) significant figures.
56. Define mixed indicators and universal indicators.
57. What are the precautions to be taken while preparing perchloric acid as titrant.
58. Write the structure of EDTA.

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PHARMACEUTICS I

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LONG ESSAY (10M)

1. Discuss in detail the historical background and development of pharmacy in India.
2. Define prescription. with the help of an ideal example describe the importance of all the parts of a prescription.
3. Define prescription. explain the handling of prescriptions. write about the sources of errors in prescription.
4. explain the factors affecting dose selection. give any two formulae to calculate children's dose.
5. Define posology. enumerate different factors affecting the selection of the dose of a drug.
6. Discuss briefly the stability problems and methods to overcome the suspension.
7. Define suspension. Explain the preparation of suspension containing diffusible and diffusible solids?
8. Define suspension. Write its advantages, disadvantages s and classification suspensions. Differentiate flocculated and deflocculated suspension?
9. What is the various instability of emulsion? Discuss them with their cause and precautions to avoid them?
10. Define and classify emulsion. Write the various identification tests for emulsion type?
11. Define Suppository. Classify suppository bases. Explain in detail the methods of preparation and write the ideal properties of suppository bases.
12. Define incompatibility. Explain the different types of physical and therapeutic incompatibilities with examples
13. Give the different types of Suppository bases. List out various qualities of an Ideal Suppository Base. Explain any two types of bases used for preparation of Suppository
14. Discuss about the suppository bases. Explain the general method of preparation of a Suppository
15. Define incompatibility. Explain the different types of physical and therapeutic incompatibilities with examples

16. Give the different types of Suppository bases. List out various qualities of an Ideal Suppository Base. Explain any two types of bases used for preparation of Suppository.
17. Explain how Suppositories are evaluated.
18. Define Incompatibility. Explain about different types of incompatibility with suitable examples and mention about its remedies.
19. Write the mechanism of dermal penetration. Explain the method of preparation of creams
20. Define semisolids. Write about different ointment bases.
21. Write the evaluation tests for Ointments.
22. Define and classify Gels. Explain in detail about preparation and evaluation of Gels

SHORT ESSAY (5 Marks)

1. Discuss the brief historical background of the profession of pharmacy in India.
2. Significance of the profession of pharmacy in relation to education and industry.
3. Write a note on pharmacy as a career.
4. Classify monophasic liquid dosage forms with examples.
5. Define dosage form and classify with examples.
6. Discuss Pediatric dose calculations based on age, body weight, and body surface area.
7. Define isotonicity. Write any two formulas to adjust the isotonicity.
8. What will be the dose for a child of 5 years if the adult dose of a drug is 400mg?
9. Calculate the dose for a child that has a body surface area of 0.57m, when the adult dose of a drug is 100mg.
10. Discuss briefly solubility enhancement techniques.
11. Define powders. Classify powders.
12. Explain geometric dilution with an example.
13. Discuss the different methods of mixing powders.
14. Explain simple and compound powders with an example.
15. How do you prepare effervescent granules by the fusion method?
16. How do you dispense eutectic powders?
17. Explain insufflations with examples.
18. Write the advantages and disadvantages of powders as the dosage form.
19. Define and classify powders based on the official grades of powders.

20. Explain dusting powders with examples.
21. Define preservatives. Classify with examples.
22. Define stabilizers. Explain with examples.
23. Explain the organoleptic additives used in monophasic liquid dosage forms with examples.
24. Explain in detail the different vehicles used in monophasic dosage forms. Give their advantages and disadvantages.
25. Define and classify suspension. Write the advantages and disadvantages of suspension?
26. Differentiate flocculated and deflocculated suspension.
27. Discuss briefly the method of preparation of suspensions containing indiffusible solids.
28. Differentiate mouth washes and Gargles.
29. Differentiate lotions and liniments.
30. Explain controlled Nocculation?
31. Discuss various methods of preparation of cmulsions.
32. Write the principle and procedure involved in the preparation of syrup 1.P.
33. Differentiate between elixirs and syrups.
34. Write a note on identification tests for emulsions with example.
35. Write a note on why emulsions arc white to creamy white.

SHORT ANSWERS (2 Marks)

1. What is Pharmacopoeia? Mention all the editions of Indian Pharmacopoeia.
2. Give the significance of Pharmacopoeias.
3. Enlist various Pharmacopoeias.
4. List the editions of Indian Pharmacopoeia chronologically
5. Mention the contents of the National Formulary of India.
6. Differentiate between Indian Pharmacopoeia and National Formulary of India.
7. What is the latest edition and year of publication of the Indian Pharmacopoeia?
8. Write the difference between Pharmacopoeia and Formulary.
9. Write any four salient features of the first edition of Indian Pharmacopoeia.
10. Write any four salient features of the second edition of Indian Pharmacopoeia.

11. Write any four salient features of the third edition of Indian Pharmacopoeia.
12. Write any four salient features of the fourth edition of Indian Pharmacopoeia.
13. Define monophasic liquid dosage forms with examples.
14. Names any four monophasic dosage forms used externally for example.
15. Names any four monophasic dosage forms used internally with example.
16. Define the terms Synergism' and Idiosyncrasy'.
17. Enlist different solubility enhancement techniques.
18. Names any four solvents used in the preparation of monophasic liquid dosage forms.
19. Names any two antioxidants used in liquid formulations.
20. Write any two examples for colouring agents and flavouring agents used in monophasic dosage forms.
21. Name any two examples of stabilizers used in monophasic liquid dosage forms.
22. Name any two antioxidants and preservatives used in monophasic liquid dosage forms.
23. Define antioxidants with examples.
24. Define preservatives with examples
25. Define stabilizers with examples.
26. Give the metric equivalents for the following: (a) one grain, (b) one ounce, (c) one teaspoonful, (d) one tablespoonful.
27. Give the metric equivalents for the following: (a) one minim, (b) one fluid ounce, (c) one tumblerful, (d) one quart.
28. Give the metric equivalents for the following: (a) one cup, (b) one pound, (c)one drop, (d) one wineglassful.
29. How many grams of a drug are required to make 120ml of a 25%w/v solution?
30. What is the percentage strength (%w/v) of a solution containing 450 mg of medicament dissolved in 90 ml of a solvent?
31. How much potassium permanganate would be required to prepare 50 ml of potassium permanganate solution of 2.8%w/v strength?
32. In what ratio 90 % alcohol and 30% be mixed to give 60% alcohol?
33. How many grams of dextrose are required to prepare 900ml of 10%w/v solution?
34. How many parts of 15%, 10% and 5% alcohols are mixed to prepare 8% alcohol?
35. How do you prepare 1 litre of 5% w/v dextrose solution from 50% w/v dextrose solution?

36. How do you prepare 500 ml of 50% alcohol from 90% alcohol?
37. How do you prepare of 50% alcohol from 80% alcohol and 30% alcohol?
38. How many litres of 8% solution can be prepared from 500gm of a solid?
39. What are isotonic solutions?
40. Define isotonic and paratonic solutions.
41. Define 'allegation' and 'proof spirit'.
42. What is the proof strength of 45% v/v alcohol?
43. Find the strength of 90% v/v alcohol in terms of proof spirit.
44. Convert 90% v/v and 40% v/v alcohol in to proof strength.
45. Convert 40% v/v alcohol in to proof spirit.
46. How do you prepare 50 litres of proof spirit from 90% v/v alcohol?
47. What is the proof spirit of an elixir containing 42%. alcohol?
48. What is the proof spirit of a 1% v/v alcohol?
49. Define the terms 'proof spirit' and 'isotonicity'.
50. Calculate the actual strength of 25° O.P. (overproof).
51. Calculate the actual strength of 45° U.P. (under proof. o.P
52. What are hypertonic and hypotonic solutions?
53. Calculate the percentage of sodium chloride required to render a procaine
54. HCI iso-osmotic with blood plasma. (1% w/v solution of procaine HCl has a freezing-point of 0.122oC and 1% w/v sodium chloride has a freezing point of 0.576°C)
55. Define hygroscopic and deliquescent powders.
56. How do you dispense potent powders?
57. Why is a double wrapping of powder required?
58. Classify powders.
59. Define cachets for example.
60. Define powder with an example.
61. Define and classify dusting powders.
62. Define eutectic powders.
63. Define insufflations with examples.
64. Define simple and compound powders.
65. What are the ingredients of dusting powders?
66. Define geometric dilution.

67. Enlist the methods of mixing powders.
68. Define Ointment. Write the types and ideal properties of ointment bases.
69. Differentiate ointments and pastes
70. What are Pastes? Give its salient features. Comment on preparation of Paste.
71. Define Ointment. Explain any two methods used for the Preparation of Ointment
72. Define Ointment. Explain Evolution tests of Ointment.
73. Define Ointment. Explain any two methods used for the Preparation of Ointment
74. What's Incompatibility? Discuss the reason for Physical Incompatibility.
75. What's Incompatibility? Discuss the reason for Chemical Incompatibility.
76. What are the causes of Physical incompatibilities and how to overcome?
77. Discuss the evaluation tests for suppository. a) Calculate the quantity of sodium chloride required for 500 ml of a 0.9 percent solution. b) Prepare 600 ml of 60 percent alcohol from 95 percent alcohol.
78. Give the properties of an ideal suppository base
79. Define gargle with examples.
80. Define mouthwashes with examples. o and 2-
81. Define ear drops and nasal drops for example.
82. Write the advantages of syrups.
83. What is invert sugar?
84. Define linctuses with examples
85. Define expectorant with examples.
86. Define throat paint with examples.
87. Define elixirs with examples.
88. Define enema with examples.
89. Deine nasal drops with examples.
90. What are structured vehicles? Give examples.
91. Name any two suspending and emulsifying agents.
92. Name any four flocculating agents used in the preparation of suspension.
93. Name any two flocculating and deflocculating agents.
94. What is the phase volume ratio? How it is useful in the preparation of emulsions.
95. What is phase inversion? How it can be prevented.
96. Classify emulsifying agents.
97. Write the primary emulsion formula for fixed oils and mineral oils.

98. Write the primary emulsion formula for oleoresin and volatile oils.
99. Write the primary emulsion formula for fixed oils and volatile oils.
100. Classify emulsions.
101. Classify suspensions.
102. Why emulsifying agent is required in the preparation of emulsions.
103. Define creaming and cracking?
104. Give Griffin's HLB value scale and its application.
105. What should be the HLB of emulsifying agent to give oil in water or water in oil emulsions?
106. Give two examples for wetting agents.
107. Define the wetting phenomenon.
108. Define surfactants with examples.
109. Enlist various identification tests for emulsion.
110. How do differentiate monophasic and biphasic liquid dosage forms for example?
111. Differentiate between ointments and pastes.
112. Ideal properties of Ointment base.
113. Mention about types of Ointment bases
114. Define Gels. What are the different gelling agents?
115. Differentiate between ointments and pastes.
116. What are Gels?
117. What are gels and creams?
118. Define Pastes
119. Types of Ointment base.
120. Define Ointment.
121. What is therapeutic Incompatibility and write the sources of errors?
122. How do you lubricate a suppository mould?
123. Give the fusion method preparation of ointment with a suitable example.
124. Write about Calibration of suppository mould
125. Describe the properties of Ideal suppository base.
126. Write about Pessaries.
127. Define Suppository and Enema.
128. Define Displacement Value? Give displacement values of any two medicaments.

129. Write the merits and demerits of Suppositories.
130. Define the terms ‘Suppositories’ and ‘Pessaries’.
131. Define Enema and mention its type.
132. Differentiate between ointments and pastes.
133. Ideal properties of Ointment base.
134. Mention about types of Ointment bases
135. Define Gels. What are the different gelling agents?
136. Differentiate between ointments and pastes
137. What are Gels?
138. What are gels and creams?
139. Define Pastes
140. Types of Ointment base.
141. Define Ointment.

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Pharmaceutical Inorganic Chemistry

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LONG ESSAY 10 MARKS

1. Describe the various sources of impurities present in pharmaceutical substances.
2. Write briefly the different sources of impurities present in pharmaceutical substances.
3. Explain the principle and procedure involved in the limit test of arsenic with a neat Labelled diagram of Gutziet's apparatus.
4. Give principle, procedure, reactions and role of reagents involved in the limit test for Lead-based on IP 1996 method.
5. Explain the various sources of impurities in pharmaceuticals. Discuss the importance of Limit tests in quality control of pharmaceuticals.
6. Write in brief the different sources of impurities present in pharmacopeial substances.
7. What are impurities? Explain different sources of impurities with examples.
8. Write the procedure and principles for the limit tests for a) Sulphates b) Iron
9. Describe the principle, apparatus and procedure for the limit test of arsenic.
10. Define limit test? List out different limit tests you have studied. Discuss in detail the limit Test for sulphate and iron.
11. Describe buffer capacity, stability of buffers, methods of adjusting isotonicity. Buffers and their role in pharmacy.
12. Discuss various types of physiological buffers. Explain the mechanism of their Buffer action.
13. Explain major buffers used in pharmaceutical preparations. What are the disadvantages of each? What factors must be taken into consideration in the Selection of a buffer?
14. What are buffers? Explain the mechanism of buffer action with an example. Briefly discuss the role of buffers in pharmacy.
15. What are Antacids? Classify them with examples. Give the ideal properties of Antacids. Write the preparation, assay and uses of sodium bicarbonate.
16. Enlist in detail any drug with their molecular formula, synonym (if any) method of preparation and use belongs to magnesium, aluminium and sodium-containing antacid.
17. Explain the principle, reaction and procedure involved in the assay of chlorinated lime and hydrogen peroxide.

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SHORT ESSAY 5 MARKS

1. What are buffers derive from the Henderson-hasselbalch equation for buffers?
2. What are buffered isotonic solutions? Give details.
3. Explain the Lewis acid and Lewis base with examples.
4. What is a buffer solution that explains the mechanism of buffer action?
5. Write the importance of buffer solutions in pharmacy.
6. Write a note on the isotonic buffer.
7. Define acids and bases according to various concepts.
8. Write a note on buffer solutions.
9. Describe various methods used to adjust isotonicity.
10. Discuss the physiological acid-base balance in the body.
11. Write a note on electrolytes used in replacement therapy.
12. Explain the preparation, assay principle, storage conditions and medical uses of calcium Gluconate injection.
13. Describe the physiological mechanism of acid-base balance in the body.
14. What is electrolyte combination therapy? Explain a note on ORS.
15. Explain the physiological role of sodium, calcium, chloride and bicarbonate ions.
16. Give the principle and reaction involved in the assay of Calcium gluconate.
17. Write a note on physiological acid-base balance.
18. Write a note on a combination of electrolyte replacement therapy.
19. Discuss the role of fluorides in dental caries.
20. What are dentifrices? Classify them with an example. Write a note on the role of fluoride as an Anticaries agent.
21. Preparation and medicinal uses of calcium carbonate and sodium fluoride.
22. Describe the method of preparation and uses of any two dental products.
23. Give the method of preparation and uses of Aluminium hydroxide gel
24. Define and classify antacids with examples. Add a note on combination antacid Therapy.
25. Define cathartics. Give the preparation and uses of any two cathartics.
26. What are GIT agents? Classify them with examples. Write a note on acidifiers.
27. What are antacids? Classify them with examples. State requirements for an ideal Antacid.
28. Define and classify antacids? Discuss the preparation, assay principle and Medicinal uses of baking soda.

29. Write the principle for the assay of magnesium hydroxide.
30. What are saline cathartics? What is their mechanism of action?
31. Enlist different antacids. Write the preparation and uses of Magnesium Hydroxide.
32. Write a note on antacid combination therapy.
33. What are antacids? Classify them with examples. Give the method of Preparation, uses and assay of Sodium bicarbonate.
34. What are gastrointestinal protectives and adsorbents. Write a short note on kaolin.
35. Define antimicrobial agents. Write the principle involved in the preparation and assay of hydrogen peroxide.
36. Describe the various mechanism of action of inorganic anti-microbial agents.
37. What are anti-microbials? Give the method of preparation and principle in the assay of chlorinated lime.
38. What are antimicrobials? Write a note on various iodine preparations.
39. Write the preparation and uses of Chlorinated lime and boric acid.
40. Explain the principle and reactions in the assay of Chlorinated lime.
41. Explain the method of preparation and assay of Ammonium chloride.
42. Explain the principle and reactions involved in the assay of copper sulphate.
43. What are Haematinics? Write the preparation and assay of ferrous sulphate.
44. What are Haematinics? Explain the preparation and assay of Green Vitriol.
45. What are emetics? Write the method of preparation and assay of Copper sulphate.
46. What are expectorants? Give the method of assay of anyone expectorant.
47. What are haematinics? Give the method of preparation, assay principle and Medicinal uses ferrous sulphate.
48. What are expectorants? Give example and mechanism of action.
49. Define and classify antidotes with examples. Write a note on activated charcoal.
50. What is cyanide toxicity? What are the symptoms and treatment for cyanide Poisoning?
51. Explain in detail any one method employed for the measurement of radioactivity.
52. Describe the precautions for storage and handling of radioisotopes.
53. Write a note on radiopharmaceutical sodium iodide I131
54. What are radiopharmaceuticals? Discuss the importance of radioisotopes used in Medicine.

55. Describe the properties of a, ß and y radiations.
56. Explain the diagnostic and therapeutic applications of radioisotopes in Detail.
57. Write the construction, working principle of the Geiger-muller counter with a neatly labelled diagram.
58. Give a brief account of hazards associated with radiopharmaceuticals.
59. Write the pharmaceutical application radioactive substances.

SHORT ANSWERS 2 MARKS

1. Define the following terms i) Osmotic pressure ii) Isotonic solution.
2. What is buffer capacity?
3. Define buffers with examples.
4. Define buffers. Give examples of two official buffers.
5. What is buffer capacity and isotonicity?
6. What is the importance of buffer in pharmacy?
7. Define the term hypotonic and hypertonic.
8. Define the term tonicity.
9. What is osmotic pressure?
10. Give any two examples of strong acid and weak acid.
11. Give any two examples of a strong base and weak base.
12. Write the limitations of Arrhenius theory.
13. Give the composition of sodium chloride injection.
14. What is the biological importance of sodium and chloride ions?
15. What is milliequvalent per litre,
16. Write the formula and uses of ORS.
17. Classify extra and intracellular electrolytes with examples
18. Give the method of preparation and uses of calcium gluconate injection.
19. Write about zinc eugenol cement.
20. What is an anticaries agent? Give example.
21. What is dental caries? Name two anticaries agents.
22. What is desensitizing agents? Give examples.
23. What are Dentifricing agents? Give examples.
24. What are dental products? Classify them with examples.

25. Write the composition and application of zinc eugenol cement.
26. What Are antacids? Give examples.
27. Define gastrointestinal protective agent. Give examples.
28. Give the method of preparation of milk of magnesia.
29. What is achlorhydria? Give its treatment.
30. Define saline Cathartic give examples.
31. Write the molecular formula and uses of milk of magnesia.
32. Write the uses of aluminium hydroxide and magnesium hydroxide.
33. Write the composition and uses of kaolin.
34. Chemical composition and uses of magnesium trisilicate.
35. Write two uses of NaHCO3.
36. What are non-systemic antacids?
37. Give the synonym of NaHCO3, MgSO4, magnesium hydroxide.
38. Define antacids. Give examples
39. Classify gastrointestinal agents for example.
40. Write adverse effects of antacids. Write the pharmaceutical importance of Bentonite powder.
41. What are antimicrobial agents? Give examples
42. Why sulphuric acid is added in the assay of Hydrogen peroxide?
43. What is the use of glycerine in the boric acid assay?
44. Define antimicrobial agent. List out the antimicrobial agents with molecular formula.
45. Preparation of boric acid?
46. Give reasons: Dilute sulphuric acid used in the assay of hydrogen peroxide.
47. Give the composition and method of preparation of Iodine tincture.
48. Mention various preparations of iodine and their uses.
49. What are antimicrobial agents? Give examples.
50. Name two antimicrobials with their molecular formula.
51. Write the molecular formula of boric acid and chlorinated lime.
52. Write the synonym for bleaching powder and its uses.
53. Write the molecular formula and uses of ZnO
54. Write the molecular formula and uses of KMNO4.
55. Define term antidotes. Give examples.
56. Haematinics? Give examples.

57. Define emetics with examples.
58. Give the chemical formula and medicinal use of sodium thiosulphate.
59. Define expectorant and emetics Give examples.
60. Give reasons a) Potassium iodide is used in the assay of copper sulphate b) HCHO used in the assay of Ammonium chloride.
61. What are expectorants? Give an example.
62. Write pharmaceutical uses of activated charcoal and sodium thiosulphate.
63. Define antidotes with examples.
64. Write the molecular formula and medicinal uses of sodium thiosulphate.
65. What are Haematinics? Give examples.
66. What are antidotes? Give the method of preparation and importance of activated charcoal
67. Write the synonym for ferrous sulphate and copper sulphate.
68. What are radiopharmaceuticals?
69. Give the importance of radioisotopes in pharmacy
70. Define half-life.
71. Write the uses of sodium iodide I131
72. Define isotope.
73. Write the storage condition of sodium iodide I131
74. Give the precautionary measure required to handle radioactive substances.

Vision and Mission of the Institution

Vision

The East Point College of Pharmacy aspires to be a globally acclaimed institution, **recognized** for **excellence in** pharmaceutical education, research and nurturing students for **holistic development.**

Mission

M1 Create pharmacy graduates through **quality education**

M2 Promote innovation, **creativity**, and excellence **in teaching**, learning, and **research**

M3 **Inspire** integrity, teamwork, critical thinking**, personal** development, and ethics in **students** and lay **the** foundation for lifelong learning

M4 **Serve** the **healthcare, technological, scientific**, and **economic** needs of then **society**.