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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination- Winter-2023

Date-03/01/2024

Course: B. Pharmacy
Subject Name: Human Anatomy and Physiology -I
Max Marks: 75

Sem: I
Subject code: BP101T
Duration: 3 Hrs.

Instructions:

1. All questions are compulsory
2. Draw diagrams/figures wherever necessary
3. Figures to right indicates full marks

Q.1. Objective Type Questions (Answer all the questions)

(10 x 2) = 20

- i. Give structural and functional classification of joints.
- ii. Explain in brief ABO blood groups.
- iii. Name the sense organs with their functions.
- iv. Discuss anatomy of neuron.
- v. Enlist the bones of appendicular system.
- vi. Define Blood pressure. enlist its types.
- vii. Discuss functions of skin.
- viii. Explain passive transport of material across the cell membrane.
- ix. Draw a neat labelled diagram of cell.
- x. Draw well labelled diagram of Lymph node.

Q.2. Long Answers (Answer 2 out of 3)

- i. Define Tissue. Classify in details, Explain location, anatomy and physiology of Muscular tissues.
- ii. Discuss the structure of heart with neat labelled diagram. Explain the systemic and pulmonary circulations.
- iii. Discuss in detail classification peripheral nervous system and enlist different cranial nerves with their functions.

Q.3. Short Answers (Answer 7 out of 9)

- i. Describe the anatomy and physiology of mitochondria.
- ii. What do you mean by feedback system. Explain positive feedback mechanisms for homeostasis.
- iii. Discuss in detail mechanism of blood clotting.
- iv. Define arteries and veins. discuss the cardiac cycle.
- v. Elaborate in detail epithelial tissue.
- vi. Explain the role of Renin-Angiotensin system in regulation of B.P.
- vii. Explain structure and functions of Eye.
- viii. Differentiate between sympathetic and parasympathetic nervous system.
- ix. Discuss in detail mechanism of muscle contraction.

—END OF THE PAPER—

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2023

Date: 11/12/2023

Course : B. Pharmacy
Subject Name : Pharmaceutical Analysis I
Max Marks : 75

Sem : I
Subject Code: BP102T
Duration : 3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions)

(10 x 2) = 20

- i) Explain principle of Mohr's method.
- ii) Explain principle, reaction involved in standardization of sodium hydroxide.
- iii) Differentiate between iodometry and iodimetry.
- iv) Define co-precipitation and post-precipitation.
- v) Explain back titration with an example
- vi) Define reference electrode and indicator electrode with example.
- vii) Describe principle of polarography.
- viii) Define oxidizing and reducing agent with example.
- ix) Differentiate between qualitative and quantitative analysis.
- x) Differentiate between accuracy and precision.

Q. 2. Long Answers (Answer 2 out of 3)

(2 x 10) = 20

- i) Describe in detail conductometric titrations.
- ii) Explain principle and different steps involved in Gravimetric analysis?
- iii) Write the principle of limit test for arsenic? Explain construction and working of Gutzeit test apparatus.

Q. 3. Short Answers (Answer 7 out of 9)

(7 x 5) = 35

- i) Give the principle, reaction for limit test for chloride and sulphate.
- ii) Explain in short masking and demasking agents.
- iii) Explain the principle, reaction involved in the estimation of Calcium Gluconate.
- iv) Describe leveling and differentiating effects in the context of non-aqueous titrations.
- v) Discuss construction and working of calomel electrode.
- vi) Define and classify errors.
- vii) Discuss neutralization curve of strong acid against strong base.
- viii) Differentiate between Volhard's and modified Volhard's method.
- ix) Explain pM indicators.

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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2023

Date: 05/01/2024

Course : B. Pharmacy
Subject Name : Pharmaceutics-I
Max Marks : 75

Sem : I
Subject Code : BP103T
Duration : 3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20

- i) Define Pharmacopoeia. Add a note on Indian Pharmacopoeia.
- ii) Enlist type of Suppositories.
- iii) Define posology. Enlist the factors affecting dose of a drug.
- iv) Define Prescription? Enlist the different parts of Prescription.
- v) Calculate the quantity of Sodium chloride required for 500 mL of 0.9% solution.
- vi) Define Syrup. Differentiate between Syrup USP & Syrup BP.
- vii) Explain the mechanism of action of solubilizing agents in enhancing the solubility.
- viii) Explain the different preservatives used in pharmaceuticals.
- ix) Define Powder and Classify its.
- x) Define suspensions with their advantages and disadvantages as a biphasic liquid dosage form.

Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20

- i) Define prescription. Explain in detail parts of prescription. Add a note on types of Prescription.
- ii) Define Suspension. Classify them & Discuss the formulation aspects of suspension.
- iii) Define pharmacopoeia. Classify the compendia and explain in detail the development of Indian Pharmacopoeia.

Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35

- i) Write a note on the Code of Ethics drafted by PCI.
- ii) Write a note on history of pharmacy profession.
- iii) What are the factors affecting posology?
- iv) Write a short note on Handling of Prescription.
- v) Write a Note on Factors affecting dose of a drug.
- vi) Discuss various formulation aspects of suspensions.
- vii) Write a note on Therapeutic Incompatibility.
- viii) Define suppository and give the importance of displacement value in preparation with example.
- ix) Write a note on "Techniques for Solubility Enhancement".

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End Semester Examination – Winter 2023

Date: 08/01/2024

Course : F.Y. B. Pharmacy

Sem : I

Subject Name : Pharmaceutical Inorganic Chemistry

Subject Code : BP104T

Max Marks : 75

Duration : 3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20

- i) Write principle involved in limit test for Chloride.
- ii) Define the term a) Hypernatremia, b) Hygroscopic
- iii) Define Pharmacopeia with example.
- iv) Define hematinic with example
- v) Why combination antacids are given?
- vi) Define emetics with example.
- vii) What is half-life of radioisotope
- viii) Enlist two properties of α -ray.
- ix) Classify pharmaceutical buffers.
- x) Write synonyms for ferrous Sulphate & Magnesium Sulphate

Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20

- i) Define & classify impurities. Discuss various sources of impurities in pharmaceutical substances with suitable examples.
- ii) Define and give classification of gastrointestinal tract agents. What are antacids? Give ideal properties of antacids. Write preparation, properties uses and assay method for Sodium Bicarbonate.
- iii) Define and classify antidote with suitable example. Discuss their mechanism of action. Write preparation, properties, uses, assay method and mechanism of action of chemical antidotes used in cyanide poisoning

Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35

- i) Write short note on Expectorants.
- ii) Write short note on anti-caries agents.
- iii) Discuss the role of major extra & intra cellular electrolytes
- iv) What are antimicrobial agents? Discuss their mechanism of action.

- v) Write a note on limit test for arsenic.
- vi) What are astringents? Give their mechanism of action. Write properties & uses of potash alum.
- vii) What are buffers? Write various applications of buffers.
- viii) What are Radiopharmaceuticals? Discuss storage conditions, precautions & handling of radioactive substances.
- ix) Write a note on history of Indian Pharmacopoeia

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DR.BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,LONERE

End Semester Examination-Winter 2023

Date:30/12/2023

Course : B.Pharmacy

Sem : I

Subject Name : Communication Skills

Subject Code : BP105T

Max.Marks : 35

Duration : 01Hr.30Min

Instructions:

1. All questions are Compulsory
 2. Draw diagrams/figures wherever necessary
 3. Figures to right indicates full marks
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Q.1. Long Answers (Answer 1 out of 2)

(1x10) = 10

- i) Explain in details barriers to communication.
- ii) Write in detail about communication styles with examples.

Q.2. Shorts Answers (Answer 5 out of 7)

(5x5) = 25

- i) Define interview.Explain various types of interview.
- ii) Discuss in detail about effective writing
- iii) Give factors affecting for prescriptive.
- iv) Describe communication style matrix.
- v) Write a note on body language?
- vi) Describe the skills which are required in active listener.
- vii) What are different perspectives in communications?

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DR.BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,LONERE

End Semester Examination-Winter 2023

Date:01/01/2024

Course : B.Pharmacy

Sem : I

Subject Name : Remedial Mathematics

Subject Code : BP106RMT

Max.Marks : 35

Duration : 01Hr.30Min

Instructions:

1. All questions are Compulsory
2. Draw diagrams/figures wherever necessary
3. Figures to right indicates full marks

Q.1. Long Answers (Answer 1 out of 2)

(1x10) = 10

- i) Find the value of x for which the function

$$f(x) = x^5 - 5x^4 + 5x^3 - 1$$

- ii) Evaluate $\lim_{x \rightarrow a} \frac{x^n - a^n}{x - a}$.

Q.2. Shorts Answers (Answer 5 out of 7)

(5x5) = 25

- i) Evaluate $\lim_{x \rightarrow 1} \frac{x^2 - 5x + 4}{x^2 - 4x + 3}$.

- ii) Differentiate $y = x^2$

- iii) Find the derivative of $y = 13x^4 - 6x^3 - x - 1$.

- iv) The distance MN is 5, where M is the point (4,-2) and N is the point (a,2a). Find the two possible values of the constant a.

- v) $(x^2 - 2x + 5)(x^3 - 3)$.

- vi) Solve $(y + \sqrt{x^2 + y^2}) dx - x dy = 0$

- vii) Find the Eigen values & vectors for the matrix $A = \begin{bmatrix} 1 & -1 \\ 2 & -1 \end{bmatrix}$.

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