

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer-2023

Date: 06/09/2023

Course : B. Pharmacy

Subject Name : Human Anatomy and Physiology-II

Max Marks : 75

Sem: II

Subject Code : BP201T

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) Draw well-labeled diagram of T.S. of small intestine.
- ii) What is artificial respiration? Mention the methods of artificial respiration.
- iii) What is Cushing's syndrome?
- iv) Mention the name of different parts of Nephron.
- v) Write any two examples of neurotransmitters.
- vi) Write note on cerebrospinal fluid
- vii) Discuss function of Digestive System
- viii) Define synapse and neuroglia
- ix) Enlist different phases of menstrual cycle.
- x) What is gynecomastia?

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

- i) Write Anatomy & Physiology of stomach. Explain Acid (HCl) production & secretion.
- ii) Explain in details female reproductive system.
- iii) Describe in details the physiology of Urine formation.

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

- i) Explain RAAS pathway.
- ii) Write note on spermatogenesis.
- iii) Brief on Pituitary gland and hormone secreted by it.
- iv) Write Anatomy & Physiology of Lungs.
- v) Write brief note on spinal cord.
- vi) Enlist organ of Digestive system and its function.
- vii) Describe different role of ATP
- viii) Describe thyroid gland and hormone produced by it.
- ix) Discuss in details structure of Neuron.

-----END OF THE PAPER-----

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination Summer-2023

Course :	B. Pharmacy	Date:	08- 09-2023
Subject Name :	Pharmaceutical Organic Chemistry-I	Sem:	II
		Subject Code :	BP202T
Max Marks :	75	Duration :	3 Hr.

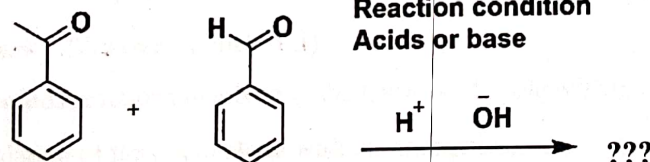
Instructions:

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) Define electrophile and nucleophile with example?
- ii) Write down the structures of
 - a) 2-methyl-3-chloro-1-pentene
 - b) 5-fluoro-3-hydroxy-pentanoic acid
- iii) Enlist the qualitative test for Aldehyde?
- iv) Explain basicity of amine?
- v) Write down the structure and uses of benzyl alcohol?
- vi) Enlist the reactions of carbonyl compounds?
- vii) What is the hybridization of carbon atom present in
 - a) Alkanes
 - b) Alkenes
- viii) Predict the product as per the Crossed Aldol Condensation in the following reaction?



- ix) Define carbocation and carbanion?
- x) What is inductive effect?

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

(2 x 10) = 20

- i) What elimination reaction? Explain reaction, mechanism kinetics, and order of reactivity of E1 and E2 reaction?
- ii) Why Aldehydes and ketones are susceptible for nucleophilic addition reactions? Explain the reaction and mechanism of Aldol condensation and benzoin condensation?
- iii) Write in detail about bimolecular nucleophilic substitution reaction (SN2) along with suitable example?

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

(7 x 5) = 35

- i) Write down the Rules for IUPAC Nomenclature for organic compounds?
- ii) Write a short note on isomerism in organic compounds?
- iii) Discuss about the free radical addition reactions of conjugated dienes?
- iv) Describe with example, halogenation of alkane?
- v) Explain Diel-Alder reaction?
- vi) Write short note on Cannizzaro's reaction?
- vii) Write about the Markownikoff's rule and Anti-Markownikoff's rule?

- viii) What are carboxylic acids? Explain the effect of substituents on acidity of carboxylic acids?
- ix) Draw the structures of a) Benzoic acid b) Ethanolamine c) Ethylenediamine d) Dichloromethane e) Benzaldehyde

-----END OF THE PAPER-----

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer 2023

Date: 11/09/2023

Course : B. Pharmacy
Subject Name : Biochemistry
Max Marks : 75

Sem : II
Subject Code : BP203T
Duration : 3hr

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 transamination and deamination.	
ii) Write differences between DNA and RNA.	
iii) Define endergonic and exergonic reactions.	
iv) Give biological significance of cholesterol.	
v) Define nucleosides and nucleotides	
vi) Write the biological functions of proteins.	
vii) Draw structures of Sucrose and Tyrosine.	
viii) Define essential fatty acids with examples.	
ix) What is fatty liver and phenylketonuria?	
x) Define energy rich compounds with examples.	
Q. 2. Long Answers (Answer 2 out of 3)	(2 x 10) = 20
i) Explain the various reactions involved in the Citric acid cycle with energetics.	
ii) Explain β -oxidation of fatty acid along with the energetics.	
iii) Define Enzyme inhibitors and discuss different types of enzyme inhibitors.	
Q. 3. Short Answers (Answer 7 out of 9)	(7 x 5) = 35
i) Explain electron transport chain.	
ii) Give the reaction sequence of Glycolysis pathway.	
iii) Define enzymes and classify them according to IUB with examples.	
iv) Define carbohydrates classify them with example and give their biological significance.	
v) What is ketoacidosis? Write the formation of ketone bodies.	
vi) Explain biosynthesis of purine.	
vii) Describe the hormonal regulation of blood glucose level.	
viii) Give the reaction sequence in Urea Cycle.	
ix) Explain replication of DNA.	

-----END OF THE PAPER-----

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer 2023

Date: 13/09//2023

Course : B. Pharmacy
Subject Name : Pathophysiology
Max Marks : 75

Sem: II
Subject Code : BP204T
Duration: 03 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
<ol style="list-style-type: none">i) Define Pathophysiology. Explain the Scope of Pathophysiology.ii) Define the following terms: a) Atrophy b) Hyperplasiaiii) Write the diagnostic tests for Myocardial Infarction (MI).iv) Define Anemia. Enlist any 4 types of Anemiav) Explain types of hepatitis.vi) Explain cause of chronic renal failure.vii) Explain sign & symptoms of gout.viii) Explain chemical mediators of inflammation.ix) Define terms leprosy & jaundice.x) Define terms hypothyroidism & hypertension.	
Q. 2. Long Answers (Answer 2 out of 3)	(2 x 10) = 20
<ol style="list-style-type: none">i) Define Asthma. Explain the pathogenesis, types, causes, and Prevention of Asthma.ii) Define TB. Explain the pathogenesis, types, causes, and Prevention of TB.iii) Define epilepsy. Explain the pathogenesis, types, causes, and Prevention of epilepsy.	
Q. 3. Short Answers (Answer 7 out of 9)	(7 x 5) = 35
<ol style="list-style-type: none">i) Write a note on UTI.(Explain the Types, Etiology, Diagnosis)ii) Define Atherosclerosis. Discuss the Pathogenesis & Causes of Atherosclerosis.iii) Define Angina Pectoris. Explain the Types, Etiology, Clinical Manifestations/ features, Diagnosis, and Treatment of Angina Pectoris.iv) Define COPD. Explain the pathogenesis, causes, and Prevention of COPD.v) Discuss in brief about rheumatoid arthritis.	

- vi) Define diabetes mellitus. Discuss the Pathogenesis & Causes of diabetes mellitus.
- vii) Explain the etiology & pathogenesis of peptic ulcer.
- viii) What is AIDS? Explain the pathogenesis, causes, and Prevention of AIDS.
- ix) Explain the etiology, pathogenesis and morphology of reversible cell injury.