Code: 12057/PCI

FACULTY OF PHARMACY

B. Pharmacy II - Semester (PCI) (Backlog) Examination, September 2021

Subject: Human Anatomy and Physiology - II

Time: 2 Hours **Max. Marks: 75**

Note: Answer any seven questions from Part – A, and one question from Part – B, and any five questions from Part – C.

PART – A (7 X 3 = 21 Marks)

1. Write the functions of cerebrospinal fluid.
2. Draw a neat labeled diagram of brain.
3. What is the basic process performed by digestive system?
4. List the functions of Stomach.
5. What is peptic ulcer disease?
6. Define Congenital defects.
7. List the female sex hormones.
8. What are important functions of thyroid gland?
9. Mention important functions of Liver.
10. What is the role of pancreas?

PART – B (1 x 14 = 14 Marks)

11. (a) Describe the protective structure and gross anatomical features of the Spinal Cord.

    (b) Describe the functional components of reflex arc.
12. Describe the phases of the female reproductive cycle.
13. Explain different lung volumes and capacities with the diagram of Spirograph and Spirometer.

PART - C (5 x 8 = 40 Marks)

14. Explain the events associated with the three stages of labor.
15. Discuss the process of Oogenesis in ovaries.
16. Explain about the Action Potential.
17. Describe the structure and function of the layer's that form the wall of GIT.
18. Explain the physiology of Urine formation.
19. Give a note on hypothalamus.
20. Write a detail note on pituitary gland and its hormone.
21. Write a note on mechanism of respiration.
22. Explain RAS pathway in regulation of Kidney function.

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Code: 12058/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Sem. (PCI) (Backlog) Examination, September 2021

Subject: Pharmaceutical Organic chemistry - I

Time: 2 Hours **Max. Marks: 75**

Note: Answer any seven questions from Part – A, and one question from Part – B, and any five questions from Part – C.

PART – A (7 X 3 = 21 Marks)

1. Define the following terms with examples:

   (a) Functional group (b) Electrophile.

2. Write the IUPAC name for the following structures:

   (a) $H_3C - CH_2 - C(C_2H_5) = CH_2$ (b) $H_3C - CH(OH) - CH_2 - CH_3$

3. Explain Sp^2 hybridization with an example.
4. Define 'free radical'. Explain its formation with an example.
5. Explain the significance of esterification test.
6. Give one example for cis-and trans-isomers.
7. Classify alkylhalides with examples.
8. Write the structure and uses of glycerol and ethylalcohol.
9. Write the structure and uses of benzeldehyde and Cinnamaldehyde.
10. Write the structure and uses of salicylic acid and amphetamine.

PART – B (1 x 14 = 14 Marks)

11. (a) Explain any two methods of preparations of alkanes.

    (b) Explain Markovnikov's addition of alkenes giving examples.

12. Explain the mechanism involved in cannizzaro and crossed-cannizzaro reactions with relevant examples.
13. (a) Write the structure and uses of benzoic acid and acetyl salicylic acid.

    (b) Explain the acidity of Carboxylic acids with special emphasis on effect of substituent on their acidity.

PART - C (5 x 8 = 40 Marks)

14. Write the IUPAC rules for alkenes with suitable examples (minimum five).
15. Describe the mechanism of 1, 2-/1, 4-addition reactions of conjugated dienes with an example.
16. Explain about halogenation of alkanes with examples.
17. Describe the mechanism and stereochemistry of S_N^2 reactions.
18. Write any two qualitative tests to differentiate various classes of alcohols.
19. Explain the mechanism involved in the aldol condensation with examples.
20. Give any three qualitative tests to identify and differentiate aldehydes and ketones.
21. Explain about structural isomerism with examples.
22. How will you differentiate primary, secondary and tertiary amines based on qualitative tests?

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Code: 12059/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Backlog) Examination, September 2021
Subject: Biochemistry

Time: 2 Hours **Max. Marks: 75**

Note: Answer any seven questions from Part – A, and one question from Part – B, and any five questions from Part – C.

PART – A (7 X 3 = 21 Marks)

1. Write biological significance of ATP.
2. Describe the utilization of ketone bodies by the body.
3. Explain hormonal regulation of glucose level in blood.
4. What is diabetes mellitus?
5. What are co-enzymes?
6. What is atherosclerosis?
7. Write significance of HMP Shunt pathway.
8. Differentiate between enzyme induction and repression.
9. What are the functions of Vitamin D and mention deficiency disorders.
10. Describe nitrogenous bases with examples.

PART – B (1 x 14 = 14 Marks)

11. Describe citric acid cycle and glycogenesis pathway.
12. Explain about various disorders of lipid metabolism.
13. Define enzymes. Write about IUB classification of enzymes and enzyme inhibitors with examples.

PART - C (5 x 8 = 40 Marks)

14. Explain in-detail about energy rich compounds.
15. Write about de novo synthesis of fatty acids (palmiticacid).
16. Explain about electron transport chain (ETC) and its mechanism.
17. Write biological role and classification of amino acids with examples.
18. Describe glycolysis pathway.
19. Describe biosynthesis and significance of dopamine, noradrenatine and adrenatine.
20. Write the biosynthesis of Pyrimidine nucleotides.
21. Explain therapeutic, diagnostic applications of enzymes and isoenzymes.
22. Describe the production of bile acids and steroid hormones from cholesterol.

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Code: 12061/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Backlog) Examination, September 2021
Subject: Computer Applications in Pharmacy

Time: 1 ½ Hours **Max. Marks: 50**

Note: Answer any two questions from Part – A, and six questions from Part – B.

PART – A (2X 10 = 20)

1. What is HTML? Explain any 10 HTML tags.
2. Explain about Laboratory Information management System (LIMS) with needs and Applications of LIMS.
3. Write about application of computers in Pharmacy.

PART – B (6 x 5 = 30)

4. Explain with example for One's complement & Two's complement method.
5. Describe about Extensible Mark-up Language characteristics and advantages of XML.
6. What is a web server? Write different types of servers.
7. Explain role of computers in hospital and clinical pharmacy.
8. Write about functions and features of Pharmacy information systems (PIS).
9. Explain about objective of Bioinformatics.
10. Write about barcode and its advantages.
11. Explain about Text Information Management System (TIMS).

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Code: 12062/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Sem. (PCI) (Backlog) Examination, September 2021

Subject: Environmental Sciences

Time: 1 ½ Hours **Max. Marks: 50**

Note: Answer two questions from Part – A, and any six questions from Part – B .

PART – A (2 X 10 = 20)

1. Discuss about soil pollution, its effect on food and health. Write about the measures to prevent Soil pollution.
2. What are renewable and non-renewable energy resources? Write about the advantages and disadvantages of these resources.
3. Write about the concept, structure and functions of Grassland ecosystem.

PART – B (6 x 5 = 30)

4. Explain why multi disciplinary approach is required to preserve the environmental balance.
5. Write about the forest resources. Measure to preserve the forest resources.
6. Discuss about the soil pollution. Write about the measures to prevent the soil pollution.
7. Write about the water pollution. Explain the effect of water pollution on human health.
8. Mention various mineral resources. Discuss about the maintenance of mineral resources.
9. Write about the air pollution. Explain the measures to prevent the air pollution in urban areas.
10. Mention about various food resources. Explain the methods to preserve the natural food resources and methods to prevent food contamination.
11. Write about aquatic resources. Explain the methods to preserve the aquatic resources.

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Code: 12060/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Backlog) Examination, September 2021

Subject: Patho Physiology

Time: 2 Hours **Max. Marks: 75**

Note: Answer any seven questions from Part – A, and one question from Part – B, and any five questions from Part – C.

PART – A (7 X 3 = 21 Marks)

1. Define the following terms
   (a) Atrophy (b) Necrosis
2. What are signs and symptoms of asthma?
3. Define thalasemia and classify it.
4. Explain alcoholic liver disease.
5. What are the causative organisms of syphilis and gonorrhea?
6. Define and classify angina pectoris.
7. What are the four principal effects of acute inflammation?
8. Write about hepatitis.
9. What are the causes and symptoms of typhoid?
10. Mention about different types of stroke.

PART – B (1 x 14 = 14 Marks)

11. Classify cancer and explain etiopathogenesis of cancer.
12. Represent the pathogenesis of atherosclerosis with neat labeled diagram.
13. Define cell injury. Explain the mechanism of cell injury.

PART - C (5 x 8 = 40 Marks)

14. Write a note on jaundice.
15. Explain in brief about Alzheimer's disease.
16. Discuss the pathogenesis of tuberculosis.
17. Describe the pathophysiology of meningitis.
18. What is megaloblastic anaemia? Discuss its pathophysiology.
19. Write a note on chemical mediators of acute inflammation.
20. Explain the etiology and pathogenesis of acute renal failure.
21. Define homeostasis. Write various components of feedback system.
22. What is the role of hypertrophy in congestive heart failure?

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Code: 6274/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI)(Main&Backlog)Examination, November 2020

Subject: Biochemistry

Time: 2 Hours **Max. Marks: 75**

PART – A

Note: Answer any Seven questions. **(7x 3=21 Marks)**

1. Give brief classification of lipids.
2. What is hyperbilirubinemia and jaundice?
3. Describe genetic code.
4. Explain substrate level phosphorylation with an example.
5. Write biological significance of cholesterol.
6. What is the normal blood glucose level? How it is regulated?
7. Write biological role of amino acids.
8. What is the difference between enzyme induction and enzyme repression?
9. What are the functions of Vitamin D? What are its deficiency disorders?
10. Write therapeutic uses of enzymes.

PART – B

Note: Answer One question. **(1x 14=14 Marks)**

11. Describe glycolysis and HMP shunt pathway.
12. Write biosynthesis of Purine nucleotides.
13. Explain the general metabolic pathways of amino acids, urea cycle and its disorders.

PART – C

Note: Answer any Five questions. **(5x8=40 Marks)**

14. Elucidate the mechanism of DNA replication.
15. What are enzymes? Write the IUB classification of enzymes with suitable examples.
16. Explain the beta-oxidation of fatty acids.
17. Explain the concept of free energy and its relationship with redox potential.
18. Describe biosynthesis and utilization of ketone bodies.
19. Explain the mechanism of enzyme inhibition with relevant examples.
20. Explain the biological-oxidation through electron transport chain.
21. Write biological role and classification of Carbohydrates with examples.
22. Write a note on regulation of enzymes.

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Code: 6277/PCI

FACULTY OF PHARMACY

B. Pharmacy II - Semester (PCI) (Main & Backlog) Examination, December 2020

Subject: Environmental Sciences

Time: 2 Hours **Max. Marks: 50**

Note: Answer any TWO Questions from Part – A,
And any SIX questions from Part – B.

PART – A (2X 10 = 20)

1. Write about the Forest Resources and Water Resources. Discuss the problems and role of individual in conservation of these resources.
2. Write about the concept, structure and function of Forest ecosystem.
3. Write about the Air pollution. Discuss the measures to be taken to prevent the Air pollution in urban areas.

PART – B (6 x 5 = 30)

4. Explain about the multidisciplinary approach to preserve the environmental balance.
5. What are renewable energy resources? Explain their advantages and disadvantages.
6. Explain about Aquatic ecosystem.
7. Write about the mineral resources and how to conserve these resources for future generation.
8. Discuss about the Soil pollution and its effect on foods and also health.
9. Write about various water resource systems. Discuss the preservation of Water resources.
10. Write about Water pollution. Explain the causes of water pollution. Discuss the measures to prevent water pollution.
11. Write about the Grassland ecosystem.

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Code: 6275/PCI

FACULTY OF PHARMACY

B. Pharmacy II - Semester (PCI) (Main & Backlog) Examination, December 2020

Subject: Patho Physiology

Time: 2 Hours **Max. Marks: 75**

PART – A

Note: Answer any Seven questions. ***(7 x3=21 Marks)***

1. What are causes of cell injury?
2. Mention various causes of acute renal failure.
3. Differentiate between myocarditis and cardiomyopathy.
4. Define the following terms
   (a) Haemohpilia (b) Sickle cell anaemia
5. What is jaundice?
6. Enumerate various thyroid diseases.
7. Define gout and write its symptoms.
8. What is peptic ulcer?
9. What are the causes of meningitis?
10. Define cell death acidosis and calcification.

PART – B

Note: Answer One question. ***(1 x14=14 Marks)***

11. Describe pathogenesis of depression in detail.
12. Define hypertension. Discuss etiology and pathogenesis of hypertension.
13. Explain in detail various cellular events of inflammation.

PART - C

Note: Answer any Five questions. ***(5x8=40 Marks)***

14. Write a note on metaplasia.
15. Explain the pathogenesis of asthma.
16. Describe the pathophysiology of congestive heart failure.
17. Write a brief note on schizophrenia.
18. Explain the causes and pathophysiology of peptic ulcer.
19. Mention etiology and symptoms of inflammatory bowel disease.
20. Define osteoporosis. Write its pathogenesis.
21. Discuss alcoholic liver disease in detail.
22. Write about urinary tract infections.

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Code:6276/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Sem. (PCI) (Main & Backlog) Examination, November 2020

Subject: Computer Applications in Pharmacy

Time: 2 Hours **Max. Marks: 50**

Note: Answer any TWO Questions from Part – A, and SIX questions from Part – B.

PART – A (2 X 10 = 20)
Answer any TWO questions from the following.

1. What is number system? Explain converting binary to decimal and decimal to binary.
2. What is DBMS? Explain characteristics and applications of DBMS.
3. Write about MS ACCESS and databases.

PART – B (6 x 5 = 30)
Answer any SIX questions from the following.

4. Explain about Data flow diagrams.
5. Explain about HTML.
6. Write about major components of Microsoft Access with its advantages and disadvantages.
7. How does the Barcode Labels Work? Write benefits of Barcodes.
8. Explain the concept of diagnostic and lab diagnostic systems.
9. Write about application of Bioinformatics.
10. Explain about Chromatographic data analysis (CDS).
11. Describe drug information storage and retrieval with different types of storage media's.

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Code: 6273/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI)(Main & Backlog)Examination, November 2020

Subject: Pharmaceutical Organic Chemistry - I

Time : 2 Hours **Max. Marks: 75**

PART – A

Note: Answer Seven Questions. **(7 X 3 = 21 Marks)**

1. Define the following terms with examples:
   (a) Aliphatic compounds (b) Homologues.
2. Write the IUPAC name for the following structures:

3. Explain Sp^3 hybridization with an example.
4. Define 'Carbocation'. Explain its formation with an example.
5. Give the classification of alkadienes with examples.
6. Write the structure and uses of ethylchloride and Iodoform.
7. Classify alcohols with examples.
8. Explain the significance of Tollen's test.
9. Write the structure and uses of acetyl salicylic acid and ethanolamine.
10. Explain benzoin Gondensation with an example.

PART – B

Note: Answer One Question. **(1X14 = 14 Marks)**

11. Define 'isomerism'. Explain various types of structural isomerism with examples.
12. (a) Write any two methods of preparation of alkylhalides.
    (b) Explain SN^2 reactions of alkyl halides giving special emphasis on Walden inversion.
13. Explain the mechanism involved in aldol condensation and crossed-aldol condensation with relevant examples.

PART – C

Note: Answer Five Question. **(5X8 = 40 Marks)**

14. Explain the IUPAC rules for alkylhalides with examples.
15. Describe about free-radical substitution reactions of alkanes with examples.
16. Explain about electrophilic addition reactions of alkenes with examples.
17. Write a note on stability of conjugated dienes.
18. Give any two methods of preparation each for aldehydes & Ketones.
19. Describe the Hinsberg method of separation of amines with examples.
20. Explain the acidity of carborylic acids with special emphasis on effect of substituents on their acidity.
21. Write the structure and uses of any five Carbonyl Compounds.
22. How do you differentiate among primary, secondary and tertiary alcohols? Give any two qualitative tests.

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Code: 6272/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Sem. (PCI) (Main & Backlog) Examination, November 2020

Subject : Human Anatomy and Physiology - II

Time: 2 Hours **Max. Marks: 75**

PART – A

Note: Answer Seven Questions. **(7 X 3 = 21 Marks)**

1. Write the function of nervous system.
2. What are the functions of spinal cord?
3. What is the role of pepsin?
4. Enlist the disorders of GIT.
5. Mention important functions (three) of thyroid gland.
6. Write the functions of female reproductive system.
7. Define BMR, mention the factors affecting it.
8. Define micturition.
9. Mention any four important functions of Liver.
10. Mention the Male and Female sex hormones.

PART – B

Note: Answer One Question. **(1X14 = 14 Marks)**

11. Discuss the process of digestion in detail along with anatomical diagram and functions of stomach.
12. Draw the anatomical diagram of brain and label various parts. Explain the functions of cerebellum.
13. Mention various endocrine glands. Discuss the anatomy and physiological functions of thyroid and parathyroid gland.

PART – C

Note: Answer Five Question. **(5X8 = 40 Marks)**

14. Explain how nervous system controls respiratory system.
15. Describe three phases of digestion.
16. List the sequence of events that generate action potential.
17. Explain RAS pathway in regulation of kidney function.
18. Discuss the process of spermatogenesis in the testis.
19. Write a note on protein synthesis.
20. Explain the release and functions of growth hormones.
21. Explain in detail about oxidative phosphorylation.

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Code No. 6047/PCI

FACULTY OF PHARMACY

B. Pharmacy II - Semester (PCI) (Supplementary) Examination, February 2020

Subject: Biochemistry

Time: 3 Hours **Max. Marks: 75**

Note: Answer all Questions from Part – A, and Two questions from Part – B, and any Seven questions from Part – C.

PART – A (10 X 2 = 20)

1. Define Transamination & Deamination.
2. What is ketoacidosis?
3. Write the functions of Nucleic acids.
4. Define & classify carbohydrates.
5. What are Isoenzymes & allosteric enzymes?
6. Enlist metabolic disorders of phenylalanine & tyrosine.
7. Give biological significance of proteins.
8. What are essential fatty acids? Give two examples.
9. Mention types of RNA & their function.
10. Explain in brief G6PD deficiency.

PART – B (2 x 10 = 20)

11. Discuss the bio synthesis of Pyrimidine nucleotide.
12. Write an essay on electron transport chain & oxidative physphorylation.
13. What are enzymes? Mention their IUB classification. Write a note on factors affecting enzyme action.

PART - C (7 x 5 = 35)

14. Describe various steps involved in glycolysis.
15. Explain in brief, β-oxidation of fatty acids.
16. Write a note on Enzyme inhibition.
17. Discuss about energy rich compounds & redox potential.
18. Describe RNA synthesis.
19. Explain the physiological importance of pentose phosphate pathway.
20. Write a note on synthesis & significance of 5-HT (serotonin).
21. Discuss urea cycle.
22. Write a note on conversion of cholesterol into vitamin D.

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Code No. 6048/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Supplementary) Examination, January 2020

Subject: Patho Physiology

Time: 3 Hours **Max. Marks: 75**

Note: Answer all Questions from Part – A, and Two questions from Part – B, and any Seven questions from Part – C.

PART – A (10 X 2 = 20)

1. Write a note on thyrotoxicosis.
2. Define the terms Invasion & Metastasis.
3. Explain the clinical features of acute renal failure.
4. What are autoimmune disorders?
5. Differentiate Atherosclerosis & Arteriosclerosis.
6. Write the pathogenesis of sickle cell anemia.
7. Explain Atrophy & Anaplasia.
8. Mention the Etiological factors for asthma.
9. What is gout, explain?
10. Mention the chemical mediators in inflammation.

PART – B (2 x 10 = 20)

11. Write in detail about pathogenesis of COPD.
12. Enumerate the events in pathogenesis of cancer.
13. Discuss the etiopathogenesis of Epilepsy & Alzheimer's disease.

PART - C (7 x 5 = 35)

14. Explain the role of H. Pylori in peptic ulcer.
15. Write a note on ischemic heart disease.
16. Discuss the pathogenesis of anemia.
17. Write a note on lymphocytes.
18. Explain the etiopathogenesis of tuberculosis.
19. Define stroke and explain its pathogenesis.
20. Write a note on irritable bowel syndrome.
21. Explain the pathogenesis of osteoporosis.
22. Discuss in briefly about electrolyte balance.

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Code No. 6058/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Supplementary) Examination, January 2020

Subject: Environmental Sciences

Time: 2 Hours **Max. Marks: 50**

Note: Answer any Two Questions from Part – A, and Six questions from Part – B.

PART – A (2 X 10 = 20)

1. Explain the role of an individual in conservation of Natural resources.
2. Describe the concept of an Ecosystem.
3. Describe the sources of Air pollution.

PART – B (6 x 5 = 30)

4. Write briefly about scope of Environmental sciences.
5. What are the functions of Forest resources?
6. Describe the Desert Ecosystem.
7. Distinguish between Renewable and Non-Renewable resources with example.
8. "Flow of energy through various tropic levels in an ecosystem is unidirectional and non-cyclic" :- Explain.
9. Write a note on pyramid of Numbers and pyramid of Biomass.
10. Explain causes of Water pollution.
11. What are measures to control soil pollution?

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Code No. 6049/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Supplementary) Examination, January 2020

Subject: Computer Applications in Pharmacy

Time: 2 Hours **Max. Marks: 50**

Note: Answer any Two Questions from Part – A, and Six questions from Part – B.

PART – A (2 X 10 = 20)

1. What is number system? Write Decimal to Binary conversion, Octal to Binary Conversion.

2. (i) Discuss briefly about the applications of computers in drug designing and validation.
   (ii) Mention the application of computers in hospital and clinical pharmacy.

3. (i) Write a note on web servers and server products.
   (ii) Write about various databases.

PART – B (6 x 5 = 30)

4. Define HTML and XML? Difference between HTML and XML.

5. Explain the project process life cycle.

6. Explain drug information storage and retrieval system.

7. What are the importances of clinical studies?

8. Write a short note on Bioinformatics Databases.

9. Explain laboratory information management system.

10. How to create a Data base table in MS ACESS.

11. Write a note on TIMS (Text Information Management System).

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Code No. 6046 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Suppl.) Examination, January 2020

Subject : Pharmaceutical Organic Chemistry – I

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions Part – A, any two questions from Part – B and any seven question from Part – C.

PART – A (10x2=20 Marks)

1 What is Isomerism? Explain with examples.

2 Write the IUPAC names of the following structures.

(a) $CH_3 - \underset{\text{OH}}{\underset{|}{CH}} - CH_2 - \underset{\text{O}}{\overset{\|}{C}} - H$ (b) $CH_3 - \underset{\text{O}}{\overset{\|}{C}} - O - C_2H_5$

3 Write any two preparation methods of Olefins.

4 Write the structure and uses of (a) Chloroform (b) Propylene glycol

5 What is Saytzeff's rule?

6 Write any two qualitative tests of esters.

7 Write the differences between SN^1 and SN^2 reactions.

8 What is Walden inversion?

9 Write the structures of citric acid and amphetamine.

10 What is a carbocation? How it is formed?

PART – B (2x10=20 Marks)

11 (a) Explain the mechanism and stereochemistry of SN^1 and reaction. (6)
(b) Write the factors affecting nucleophilic substitution reaction. (4)

12 (a) Explain the mechanism of Cannizaro reaction. (5)
(b) Write about 1, 2, - addition and 1, 4 – addition of conjugated dienes. (5)

13 What is E_2 reaction? Explain its mechanism. Explain the evidences of E_2 reaction? (2+3+5)

PART – C (7x5=35 Marks)

14 Write the preparation methods of alkylhalides.

15 Write any five nucleophilic addition reactions of aldehydes followed by loss of water molecule.

16 Explain the mechanism of benzoin condensation.

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17 Write the increasing order of basicity of following amines and justify

$CH_3 - HN_2$, $CH_3 - \underset{\displaystyle CH_3}{\overset{\displaystyle CH_3}{\overset{|}{N}}} - CH_3$, $CH_3 - \underset{\displaystyle H}{\overset{\displaystyle CH_3}{\overset{|}{N}}} - H$

18 Explain the mechanism of electrophilic addition reactions of alkenes.

19 Write the product of the following reaction and explain the mechanism.

$$CH_3 - CH = CH_2 + HBr \xrightarrow{Peroxide}$$

20 Write the structures and uses of : (2+1+2)
(a) Formaldehyde
(b) Acetone
(c) Hexamine

21 Explain the chemical reactions of carboxylic acids.

22 Explain in detail about stability of primary, secondary and tertiary carbocations.

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Code No. 6045 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Suppl.) Examination, January 2020

Subject : Human Anatomy and Physiology – II

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part – A, any two questions from Part – B and any seven questions from Part – C.

PART – A (10x2=20 Marks)

1 Define the terms Reflex and Reflex arc.
2 What is the importance of salivary glands?
3 Define the term Asthma, what are symptoms?
4 Explain Maturation reflex.
5 What is circadian rhythm?
6 What is homeostasis?
7 Define the term Osmosis, osmotic pressure.
8 What is BMR? Explain its importance.
9 Mention the components of WBCs.
10 What is the importance of sperm?

PART – B (2x10=20 Marks)

11 (a) Write in detail about "Diencephalon". (6)
(b) Enumerate the functions of thalamus. (4)
12 (a) Write in detail about the transport of O_2 and CO_2 (oxygen and carbon dioxide) in the blood. (6)
(b) Explain the factors affecting the transport of O_2 and CO_2. (4)
13 (a) Explain about female reproductive cycle with diagram. (5)
(b) Give a note on sex hormones. (5)

PART – C (7x5=35 Marks)

14 Write a note on Neurotransmission with a neat labeled diagram.

15 Write short notes on digestion of proteins in GIT.

16 Briefly write about formation, storage and release of Thyroid hormones.

17 Write a internal and external respiration with suitable diagrams.

18 Explain Oogenesis with a diagram.

19 Write a note on different types of peristalses in GIT.

20 Write the role of ADH in formation of Urine.

21 What is monosynaptic reflex? Explain it with suitable example with the help of a diagram?

22 Discuss protein synthesis with a diagram.

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Code No. 13233 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Main & Backlog) Examination, August 2019

Subject : Computer Applications in Pharmacy

Time : 2 Hours **Max. Marks: 50**

Note: Answer two questions Part – A any six questions from Part – B.

PART – A (2x10=20 Marks)

Answer any Two of the following:

1 What is number system? Write Binary to Decimal conversion and Decimal to Binary conversion. (10)

2 Write a note on Drug information storage and discuss briefly about applications of computer in Dispensing of Drugs. (10)

3 (a) Write a note on web servers and server products. (5)
(b) Write about MS-ACCESS. (5)

PART – B (6x5=30 Marks)

Answer any Six of the following:

4 What is HTML? Application of HTML.

5 How to plan and manage the New Project?

6 What is the importance of Drug Database system in MYSQL

7 What is the importance of Clinical studies?

8 Write a short notes on Bioinformatics.

9 Explain chromatographic data analysis system.

10 Explain Text Information Management System.

11 Explain Electronic prescribing and Discharging system.

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Code No. 13231 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Main & Backlog) Examination, July 2019

Subject : Biochemistry

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions Part – A, any two questions from Part – B and any seven questions from Part – C.

PART – A (10x2=20 Marks)

1 Define glycolysis and gluconeogenesis.
2 Write the functions of cholesterol.
3 What are coenzymes?
4 Differentiate between DNA & RNA.
5 What is substrate level phosphorylation?
6 Define and classify carbohydrates.
7 Write a note on phenyl ketonuria.
8 What are essential and non-essential amino acids? Give two examples of each.
9 Explain in brief G6PD deficiency.
10 Give biological significance of Lipids.

PART – B (2x10=20 Marks)

11 Write an essay on electron transport chain and oxidative phosphorylation. (10)
12 What are enzymes? Mention their IUB classification? Write a note on factors affecting enzyme action. (10)
13 Discuss the biosynthesis of purine nucleotide. (10)

PART – C (7x5=35 Marks)

14 Explain in brief, β-oxidation of fatty acids.

15 Write a note on clinical applications of enzymes.

16 Discuss Urea cycle.

17 Explain the physiological importance of pentose phosphate pathway.

18 Discuss about energy rich compounds and redox potential.

19 Write a note on conversion of cholesterol to bile acids.

20 Describe RNA synthesis.

21 Write a note on ketogenesis.

22 Discuss TCA cycle in brief.

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Code No. 13230 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Main & Backlog) Examination, July 2019

Subject : Pharmaceutical Organic Chemistry – I

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions Part – A, any two questions from Part – B and any five question from Part – C.

PART – A (10x2=20 Marks)

1 Define Isomerism. Give some examples.
2 Write the structure of the following organic compounds.
(a) 3, 4-dibromo-I-butene (b) 2 – butyne
3 Write any two preparation methods of Paraffins.
4 Write the structure and use of (a) Dichloromethane (b) Glycerol
5 What is a carbocation? How it is formed?
6 Write the increasing order of acidity of the following
Cl CH_2 COOH, Cl_2 CH COOH, F CH_2 COOH
7 Explain any two qualitative tests for carboxylic acids.
8 Write the structure and uses of paraldehyde and salicylic acid.
9 Define electrophile and nucelophile with examples.
10 What is diazotization reaction?

PART – B (2x10=20 Marks)

11 (a) Explain the mechanism and stereochemistry of SN^2 reaction. (3+3)
(b) Explain any two tests used to differentiate primary, secondary and tertiary alcohols. (4)

12 (a) Explain the mechanism involved in aldol condensation. (5)
(b) Write a short note on stability of conjugated dienes. (5)

13 (a) Explain the qualitative tests used to detect carbonyl compounds. (6)
(b) Write the structure and uses of (a) citric acid (b) methyl salicylate (4)

PART – C (7x5=35 Marks)

14 Explain the mechanism of free radical substitution reaction of alkanes.
15 Write a short note on basicity of amines.
16 Explain Perkin condensation.
17 Write the preparation methods of aldehydes.
18 Write the product of the following reaction and explain
$CH_3 – CH = CH_2 + HBr \longrightarrow ?$
19 Write the differences between substitution and elimination reactions.
20 Write the qualitative tests of esters.
21 Explain anti-Markovnikoff's rule.
22 Explain the mechanism of crossed Cannizaro reaction.

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Code No. 13229/PCI

FACULTY OF PHARMACY

B. Pharmacy II-Sem. (PCI) (Main & Backlog) Examination, July 2019

Subject: Human Anatomy and Physiology - II

Time: 3 Hours **Max. Marks: 75**

Note: Answer all Questions from Part – A, and Two questions from Part – B, and any Seven questions from Part – C.

PART – A (10 X 2 = 20)

1. Describe the structure of spinal cord.
2. Write about the formation of bile salts.
3. Mention kidney function tests. What is the importance of serum creatine?
4. What are the hormones secreted by adrenal gland? What are their actions?
5. Brief about pulmonary ventilation.
6. Write a note on mechanism of hormones.
7. Write the function of pineal gland.
8. Briefly explain about nerve action potential.
9. Give a note on chromosomes.
10. Which chromosome determines the sex?

PART – B (2 x 10 = 20)

11.(a) Explain the mechanism involved in the formation of concentrated urine. 7
(b) Brief up about artificial respiration. 3

12.(a) Write a detail note on pituitary gland and its hormones. 6
(b) Give a short note on hypothalamic hormones and its homeostasis with pituitary hormone. 4

13.(a) Give the summary of digestion of carbohydrates, lipids, proteins in GIT. 7
(b) Write the formation of ATP. 3

PART - C (7 x 5 = 35)

14. Give a note on hypothalamus.
15. Discuss about the role of Boyels law in respiration.
16. Write a note on physiology of urine formation.
17. Explain the function of pancreatic juice in the process of digestion.
18. Discuss about calcium homeortasi by the endocrine system using a diagram.
19. Write a note on peristalsis in GIT.
20. Explain RAS (Renin Angiotensin aldosterone pathway) pathway in regulation of kidney functions.
21. Write about parturition and role of different hormones involved.
22. Give a note on spermatogenesis with suitable diagram.

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Code No. 13232 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Main & Backlog) Examination, August 2019

Subject : Patho Physiology

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions Part – A, any two questions from Part – B and any seven question from Part – C.

PART – A (10x2=20 Marks)

1 What are T-lymphocytes and their functions?
2 What is calcification?
3 What are peptic ulcers?
4 Mention different types of Hepatitis.
5 Name the types of STD's with their causative agents.
6 Write different types of angina pectoris in briefly.
7 Define the terms Metaplasia and Hyperplasia.
8 Differentiate mania and depression.
9 Enumerate different types of anaemia.
10 Explain scar formation in tissue repair.

PART – B (2x10=20 Marks)

11 Write the pathogenesis of Diabetes mellitus in detail. (10)

12 (a) Explain the pathogenesis of HIV infection. (6)

(b) Write a note on Hemophilia. (4)

13 Enumerate the cellular events in inflammation in detail. (10)

PART – C (7x5=35 Marks)

14 Write about pathogenesis of acute renal failure.

15 What is hepatitis? Explain different types of hepatitis.

16 Explain the basic principles in wound healing.

17 Write a note on meningitis.

18 Discuss the etiopathogenesis of Parkinson's disease.

19 Explain the pathogenesis of Congestive heart failure.

20 Write a note on syphilis.

21 What are different types of feedback systems and explain in briefly?

22 Discuss the pathogenesis of hypertension.

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Code No. 13100/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Suppl.) Examination, February 2019

Subject: Biochemistry

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part – A, Any twp questions from Part – B and any Seven questions from Part - C.

PART – A (10X2 = 20 Marks)

1. What is a carbohydrate and its function in human body?
2. What are energy rich compounds?
3. What are lipids and their function in human body?
4. What are Glycogen storage disease (GSD)?
5. What is Albinism and phenylketonuria?
6. What is Ketoacidosis?
7. What is enzyme inhibition?
8. Define Isoenzymes with examples.
9. What is Jaundice and its symptoms?
10. Define Transcription and Translation.

PART – B (2X10 = 20 Marks)

11. (a) What is Diabetes mellitus (3)
    (b) Write about HMP shunt Pathway and significance (7)

12 (a) Write a note on Factors effecting Enzyme activity (7)
    (b) Explain Coenzymes with biochemical functions (3)

13 (a) Write a note on lipid metabolism (4)
    (b) Explain various lipid metabolism Disorders (6)

PART – C (7X5 = 35 Marks)

14. Explain about DNA replication.
15. Write a note on conversion of Cholesterol into bile acids and its biological significance.
16. Write about catabolism of Heme.
17. Write in detail about oxidation of saturated fatty acids.
18. Write short note on IUB system of classification of enzymes with examples.
19. Write short note on classification of carbohydrates and their biological significance.
20. Explain about Gluconeogensis pathway and significance.
21. Write about Oxidative phosphorylation with mechanism.
22 Write about biosynthesis of pyrimidine nucleotides.

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Code No. 13101/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Suppl.) Examination, February 2019

Subject: Pathophysiology

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part – A, Any two questions from Part – B and any Seven questions from Part - C.

PART – A (10X2 = 20 Marks)

1. Define cell injury
2. What causes arthiritis?
3. Define the following.
   a) Angina pectoris b) Congestive heart failure
4. Mention the parts of heart.
5. What is the role of mast cells in asthma?
6. Mention the types of anaemia.
7. What are the causes of the chronic renal failure?
8. Distinguish between exocrine and endocrine gland.
9. What are the signs and symptoms of peptic ulcer.
10. What is the cause of jaundice?

PART – B (2X10 = 20 Marks)

11. Define cell injury. Explain the mechanisms of cell injury.
12 What is hypertension? Explain the pathophysiology of hypertension.
13 Discuss neural basis of epilepsy. Add a note on types of epilepsies.

PART – C (7X5 = 35 Marks)

14. Explain the role of various chemical mediators of inflammation.
15. Explain briefly about hyperplasia.
16. Describe the pathophsiology of thalassemia
17. What is ischemic heart disease? Explain its types.
18. Discuss the pathogenesis of bronchial asthma.
19. Write a note on hypo and hyperthyroidism.
20. What is Alzheimer disease? Enumerate its signs and symptoms.
21. What are peptic ulcers? Discuss pathophysiology.
22. Describe the causes and symptoms of AIDS.

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Code No. 13102/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Suppl.) Examination, February 2019

Subject: Computer Applications in Pharmacy

Time: 2 Hours **Max.Marks: 50**

Note: Answer any two questions from Part – A and any six questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Explain different number systems used in computer's (binary, decimal, octal, hexadecimal).

2 Describe about laboratory information management system.

3 Write about XML.

PART – B (6x5 = 30 Marks)

4 Explain the concept of data flow diagrams.

5 Discuss about web servers and server products.

6 Differentiate hospital and clinical pharmacy.

7 Discuss about databases of bioinformatics.

8 Write about electronic prescribing and discharge systems.

9 Explain about HTML.

10 Write a note on biological databases.

11 What are objectives of bioinformatics?

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Code No. 13099 / PCI

FACULTY OF PHARMACY

B. Pharmacy II Semester (PCI) (Suppl.) Examination, February 2019

Subject: Pharmaceutical Organic Chemistry – I

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part- A, Any two questions from Part – B and Any seven questions from Part – C.

PART – A (10 x 2 = 20 Marks)
Answer ALL questions. All questions carry equal marks.

1. Define the following terms with examples.
   a) Aromatic compounds
   b) Functional group
2. Write the common name and IUPAC name for the following structures.

   a) $H_3C - CH_2 - CH(CH_3) - CHO$

   b) $H_3C - CH_2 - O - CH_2 - CH_3$

3. Give an example for a cis and trans isomer.
4. Write the structures and uses of any two carboxylic acid compounds.
5. Classify alcohols with relevant examples.
6. Explain the significance of Tollen's test.
7. Write the structure and uses of acetone and hexamine.
8. Write the structure uses of benzoic acid and acetyl salicylic acid.
9. What is an amine? Give structures and uses of any two amines.
10. Write the structures and uses of ethyl alcohol and glycerol.

PART – B (2 x 10 = 20 Marks)
Answer any TWO questions. All questions carry equal marks.

11. Define 'isomerism'. Explain various types of structural isomerism with relevant examples. 10
12. Differentiate between SN^1 and SN^2 reactions and discuss their mechanisms with examples. 10
13. Explain the mechanism involved in aldol condensation and mention about crossed-aldol condensation. 10

..2

PART – C (7x 5 = 35 Marks)
Answer any SEVEN questions. All questions carry equal marks.

14 Explain the IUPAC rules for alkenes with suitable examples.

15 Explain the 1,2 / 1,4-addition reactions of alkadienes.

16 Write any two methods for synthesis of alkyl halides with suitable examples.

17 ow do you distinguish among primary, secondary and tertiary alcohols based on chemical reactions?

18 Explain the mechanism involved in nucleophilic addition reactions of carbonyl compounds. Give any two examples.

19 Write any two qualitative tests of carbonyls.

20 Write the preparation of esters and amides with suitable examples.

21 Explain the Hinsberg method of separation of amines.

22 Explain in detail about stability of conjugated dienes.

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Code No. 1225 / PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI)(Main) Examination, July 2018

Subject: Human Anatomy and Physiology – II

Time: 3 Hours **Max.Marks: 75**

Note: Answer all questions from Part-A, any two questions from Part-B and any seven questions from Part-C.

PART – A (10x2 = 20 Marks)
Answer all questions. All questions carry equal marks.

1 Write a note on role of pepsin in digestion.
2 What are the various neurotransmitters?
3 Mention the physiological significance of BMR.
4 What is artificial respiration?
5 Enlist the hormones of pancrease with their function.
6 List out the functions of DNA.
7 Name few disorders of kidney.
8 What are the functions of female reproductive system?
9 Discuss the role of ATP in biological system.
10 Explain the disorders related to thyroid gland.

PART – B (2×10 = 20 Marks)
Answer any two questions. All questions carry equal marks.

11 Discuss the anatomy and functions of GI tract with a neat labelled diagram.
12 Discuss the anatomy and functions of kidney with a neat labelled diagram.
13 a) Write a note on various respiratory centers.
b) Add a note on lung volumes and capacities of spirogram with a neat labelled diagram.

PART – C (7×5 = 35 Marks)
Answer any seven questions. All questions carry equal marks.

14 Define reflex action. Add a note on various components of reflex arc.
15 Explain the various parts of brain with a labelled diagram.\
16 Write a note on physiology of urine formation.
17 Write a note on a role of RAS in kidneys.
18 What are the various evaluation techniques used to know the kidney functions?
19 Write a note on anatomy of male reproductive system.
20 Write in detail about Oogenesis.
21 What are the hormones secreted by pituitary gland and their functions.
22 Explain the genetic pattern of inheritance.

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Code No. 1228 / PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Main) Examination, August 2018

Subject: Computer Applications in Pharmacy

Time: 2 Hours **Max.Marks: 50**

Note: Answer any two questions from Part – A & any six questions from Part – B.

PART – A (10x2 = 20 Marks)

1 What is a number system? Convert binary number into decimal, octal, hexadecimal and vice versa with example.

2 Describe any 10 HTML tags

3 Write about electronic prescribing and discharge system.

PART – B (6x5 = 30 Marks)

4 Write a note on Web servers and server products.

5 what is database? Explain about MS Access database.

6 Write about diagnostic and lab-diagnostic system.

7 Write a note on data flow diagrams.

8 Explain the concept of chromatographic data analysis.

9 Discuss about applications of computers in pharmacy.

10 Illustrate text information management system.

11 Write about XML.

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Code No. 1230/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Main) Examination, August 2018

Subject: Patho Physiology

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part – A, Any twp questions from Part – B and any Seven questions from Part - C.

PART – A (10X2 = 20 Marks)

1. What are the patterns of cell death?
2. Define the following:
   (a) Hyperplasia (b) Atrophy
3. What is diabetes? How it is caused?
4. Differentiate between asthma and COPD.
5. Define Angina pectoris and congestive heart failure.
6. Explain the pathophysiology of Parkinson's disease.
7. What are the causes of hepatitis B?
8. Define osteoporosis and osteoarthritis.
9. What is neoplasm? List out the types of neoplasm's.
10. What is meningitis and it's symptoms?

PART – B (2X10 = 20 Marks)

11. Write briefly about the principle of wound healing in the skin.

12 Describe the reversible and irreversible cell injury

13 Discuss the pathophysiology of any one disease.

PART – C (7X5 = 35 Marks)

14. Define hypertension. Explain the factors affecting it.

15. What is aneamia? Classify various types of anemia.

16. Discuss the pathogenesis of bronchial asthma.

17. What is Parkinson's disease? Enumerate its signs and symptoms.

18. What are sex harmones? Disuss any one sex harmone disorder.

19. Define gout? Discuss its causes and symptoms.

20. Explain etiology and pathogenesis of schizophrenia.

21. Define inflammation. Explain the causes of chronic inflammation.

22. What are the causes of liver cirrhosis?

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Code No. 1229/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Main) Examination, August 2018

Subject: Environmental Sciences

Time: 2 Hours **Max. Marks: 50**

Note: Answer two questions from Part – A, Any six questions from Part – B.

PART – A (2X10 = 20 Marks)

1. Classify the different types of forests. What are the resources that we get from forest.
2. Explain the different aquatic ecosystems. Explain each one in detail.
3. Classify the natural resources. Briefly explain each one.

PART – B (6X5 = 30 Marks)

4. Define ecosystem. What is the structure of an ecosystem?
5. Briefly explain the reasons for water stress.
6. Explain the different desert ecosystems.
7. What are the causes of air pollution?
8. What are the different mineral resources? List and give the uses of some minerals.
9. Why land is considered as a natural resource? What is weathering?
10. Explain the different grass land ecosystems.
11. What are the different energy resources? Explain any two in detail.

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Code No. 1227/PCI

FACULTY OF PHARMACY

B. Pharmacy II – Semester (PCI) (Main) Examination, August 2018

Subject: Biochemistry

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part – A, Any two questions from Part – B and any Seven questions from Part - C.

PART – A (10X2 = 20 Marks)

1. What is a Carbohydrate and its function in human body?
2. What are glycogen storage disease?
3. Define protein and write its functions in human body
4. What is atherosclerosis.
5. What are energy rich compounds?
6. What is a genetic code?
7. Define Enzyme induction.
8. Define coenzymes with biochemical functions.
9. What is jaundice and its symptoms?
10. Define De novo synthesis of fatty acids..

PART – B (2X10 = 20 Marks)

11. (a) Write about the biological significance of ATP and cyclic AMP (3)
    (b) Write about Citric acid cycle pathway, energetics and significance (7)

12 Write a note on lipid metabolism. Explain various lipid metabolism disorders (10)

13 (a) Explain about amino acid metabolism (5)
    (b) Write about Urea cycle and its disorders (5)

PART – C (7X5 = 35 Marks)

14. Explain about Electron transport chain (ETC) and its mechanism.
15. Write a note on Transamination and deamination of aminoacid metabolism
16. Write about catabolism of purine nucleotides.
17. Write in detail about Oxidation of saturated fatty acids.
18. Write a short note on Enzyme inhibitors with examples.
19. Write a short note on hormonal hormonal regulation of Blood Glucose levels and Diabetes mellitus.
20. Explain about hyperbilirubinemia and jaundice.
21. Write about Glycosis pathway, energetic and significance.
22. Explain about diagnostic and therapeutic applications of enzymes and isoenzymes.

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Code No. 1226 / PCI

FACULTY OF PHARMACY

B. Pharmacy II-Semester (PCI) (Main) Examination, August 2018

Subject: Pharmaceutical Organic Chemistry – I

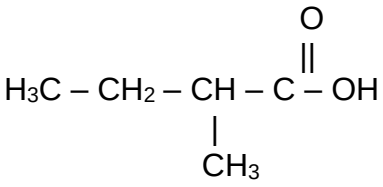
Time: 3 Hours **Max. Marks: 75**

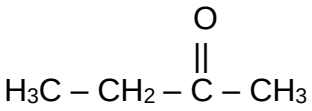
Note: Answer all questions from Part- A, Any two questions from Part – B and Any seven questions from Part – C.

PART – A (10 x 2 = 20 Marks)
Answer ALL questions. All questions carry equal marks.

1 Define the following terms with examples:
   a) Aliphatic compounds
   b) Aromatic compounds.

2 Write the common name and IUPAC name for the following structures.

a) 

b) 

3 Write the structures and uses of any two aldehydes or ketones.
4 What is a carbocation? Give two examples.
5 Write the structure and uses of benzoic acid and salicylic acid.
6 Write the general structures of an amide and an ester by giving examples.
7 What is hydridization.
8 Explain the significance of esterification test.
9 Aliphatic amines are more basic than aromatic amines. Justify.
10 What is an electrophile? Give examples.

PART – B (2x10 = 20 Marks)
Answer any TWO questions. All questions carry equal marks.

11 a) Differentiate between Markovnikov's and Anti-Markovnikov's addition of alkenes. 5
   b) Write about addition reactions of dienes. 5

12 What are alkyl halides? Give examples. Discuss the SN_1 and SN_2 reactions and mechanism with examples. 10

13 Discuss about various reactions (minimum 5) of aldehydes and ketones with examples. 10

..2

Part – C (7x5 = 35 Marks)
Answer any SEVEN questions. All questions carry equal marks.

14 Write the IUPAC rules for nomenclature of carbonyls compounds (aldehydes & ketones) with examples.

15 Write the structures and uses of any five alcohol compounds.

16 Describe the mechanism involved in halogenation of alkanes with special emphasis on chlorination of propane.

17 Give a note on oxidation of alcohols.

18 Write the structure, IUPAC name and uses of chloroform and tetrachloroethylene.

19 Write any two methods of preparation for each of aldehydes and ketones.

20 Explain the mechanism involved in cannizzaro reaction with examples.

21 Classify amines with examples and give the structures and uses of any two amine compounds.

22 Explain the acidity of carboxylic acids with special emphasis on effect of substituent on their acidity.