[LL 505] NOVEMBER 2017 **Sub.Code : 5056**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER VI – BIOCHEMISTRY - II

Q.P. Code: 525056

Time: Three hours **Maximum : 50 Marks**

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Brief about the conversion of phenylalanine to tyrosine. Describe in detail about phenylketonurias.

II. Write notes on: **(5 x 4 = 20)**

1. DNA repair mechanism.
2. Glutathione.
3. Tests to assess renal tubular function.
4. Polymerase chain reaction.
5. Metabolic acidosis.

III. Short answers on: **(10 x 2 = 20)**

1. Applications of electrophoresis.
2. Lesch–Nyhan’s syndrome.
3. Products formed from glycine.
4. Maple syrup urine disease.
5. Inhibitors of transcription.
6. Histamine.
7. Gamma amino butyric acid.
8. Phase II reaction of xenobiotics.
9. Functions of parathormone.
10. Nitric oxide.

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[LN 505] AUGUST 2018 **Sub.Code : 5056**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER VI – BIOCHEMISTRY - II

Q.P. Code: 525056

Time: Three hours **Maximum : 50 Marks**

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Write in detail about ammonia production, transport and disposal. Add a note on disorders of urea cycle.

II. Write notes on: **(5 x 4 = 20)**

1. Tests done to assess synthetic functions of liver.
2. Properties of genetic code.
3. Respiratory acidosis.
4. Importance and applications of recombinant DNA technology.
5. Proteinuria.

III. Short answers on: **(10 x 2 = 20)**

1. Importance of transamination reaction.
2. Causes of secondary gout.
3. Enzymes as tumour markers.
4. Point mutation.
5. Denaturation reactions of proteins.
6. Cystinosis.
7. Melatonin.
8. Normal value of plasma osmolality and urine osmolality.
9. Orotic aciduria.
10. Cell cycle.

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[LN 505] NOVEMBER 2018 **Sub.Code : 5056**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER VI – BIOCHEMISTRY - II

Q.P. Code: 525056

Time: Three hours **Maximum : 50 Marks**

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Write briefly the mechanisms by which the pH of the body fluids is regulated. Add a note on acid base disturbances with examples.

II. Write notes on: **(5 x 4 = 20)**

1. Post translational modifications with examples.
2. Blotting techniques.
3. Classify jaundice based on liver function tests.
4. Structure of collagen.
5. Classes of Immunoglobulins.

III. Short answers on: **(10 x 2 = 20)**

1. Structure of tRNA.
2. Lead poisoning.
3. Secondary hyperuricemias.
4. Draw normal protein electrophoretic pattern.
5. Secondary structure of proteins.
6. Classification of aminoacids based on metabolic fate.
7. Hartnup’s disease.
8. Microalbuminuria and its importance.
9. Reactive oxygen species.
10. DNA fingerprinting.

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[LP 505] AUGUST 2019 **Sub.Code : 5056**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER VI – BIOCHEMISTRY - II

Q.P. Code: 525056

Time: Three hours **Maximum : 50 Marks**

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Explain the biochemical basis of clinical features of porphyrias.

II. Write notes on: **(5 x 4 = 20)**

1. Mutation.
2. Types, properties and functions of different classes of immunoglobulins.
3. Congenital jaundice.
4. Genomic library.
5. Products formed from tryptophan.

III. Short answers on: **(10 x 2 = 20)**

1. Tests to assess biosynthetic function of liver.
2. Splicing of hnRNA (hetero nuclear RNA).
3. Give the normal values (reference interval) for the following parameters in blood/serum.

   a) Creatinine b) Potassium c) TSH d) pH
4. Compare promoter with enhancer.
5. Role of anti diuretic hormone in the regulation of osmolality.
6. Role of different types of RNA in protein synthesis.
7. Hemoglobin electrophoresis of 2 year old boy with severe anemia showed elevated levels of HbF and HbA2 without any HbA. How will you interpret this?
8. Name four conditions in which Albumin: Globulin ratio is reversed and state the reason for the reversal.
9. What are the laboratory tests done for diagnosis of adrenal hypofunction and hyperfunction?
10. Give two examples for xenobiotic metabolism acting on endogenous substance.

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[LP 505] NOVEMBER 2019 **Sub.Code : 5056**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER VI – BIOCHEMISTRY - II

Q.P. Code: 525056

Time: Three hours **Maximum : 50 Marks**

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Describe the primary, secondary, tertiary and quatenary structure of proteins.

II. Write notes on: **(5 x 4 = 20)**

1. Renal function tests.
2. Metabolism of catecholamines.
3. Metabolic alterations induced by alcohol metabolism.
4. Functions of proteins and enzymes involved in DNA replication.
5. Tests done to assess biosynthetic functions of liver.

III. Short answers on: **(10 x 2 = 20)**

1. Cystinuria.
2. Transamination.
3. Principle of electrophoresis technique.
4. Four synthetic analogues of purine and pyrimidine bases used as therapeutic agent.
5. DNA finger printing.
6. Oxygen dissociation curve of hemoglobin.
7. Markers of cholestasis.
8. Henderson - Hasselbalch equation.
9. Laboratory diagnosis of multiple myeloma.
10. Mechanism of action of allopurinol.

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