

**Government Medical Collage, Surat**  
**Preliminary Examination, December-2016 Biochemistry paper – II**  
**Duration : 3 hours** **Maximum Mark: 50**

**Section I**

**Q: 1 Short Notes ( 2 out of 3)** **(08 Marks)**

1. Post-transcription modification.
2. Explain Type of Protein Structure.
3. Types , Causes and differentiation of Jaundice by serum and urine examination.

**Q: 2 Write in Brief ( 4 out of 6)** **(12 Marks)**

1. Primary & Secondary cause of Hyperuricemia (Gout)
2. Biochemical explanation of Albinism & Alkaptonuria
3. Enzyme Inhibition
4. Molecular basis of Sickle cell anaemia
5. Genetic codon
6. Diagnostic importance of isoenzyme

**Q: 3 Write answer in few line (5 out of 6)** **(05 Marks)**

1. Type of RNA
2. Name the enzyme of the DNA replication
3. Type of Haemoglobin
4. Zwitter ions
5. Orlistat (pancreatic and hepatic lipase inhibitor) is use as Anti-Obesity agent.
6. Semi-essential amino acid

**Section II**

**Q:4 Read Following Case & Answer the Question** **(10 Marks)**

56 year male patient came in emergency with alter-conciuosness & haemetemesis . He was suffering from chronic cirrhotic liver disease due to chronic alcoholism. On examination , it was found that he has edema on both lower limb, fluid collection in peritoneal cavity (Ascites), yellowish discolouration of skin & sclera (icterus). On blood investigation following was found.

Blood Glucose : 50 mg %

Serum Protein : 5.5 gm %

Serm Albumin : 2.0 gm %

Serum Total Billirubin : 20 mg%

APTT – Test : 60 second,

APTT – Control : 30 second

APTT – INR : 2

**Physician advise to give Following treatment**

10% Dextrose with Thiamine (Vit-B1)

Vitamin K

10% Albumin

Oral Neomycin ( Antibiotic)

Questions:

1. Explain biochemical reason for edema & ascites in this patient.
2. Explain biochemical reason for Haemetemesis in this patient.
3. Why dextrose plus thiamine is given to this patient?
4. How Oral Neomycin (Anti-microbial, Antibiotic) reduce risk of cerebral encephalopathy?
5. What is role of Vitamin K in this case?

**Q:5 Write a justification in 2-3 lines (5 out of 7)** **(10 Marks)**

1. Mutations are not always harmful.
2. Blue fluorescent light is useful in treatment of neonatal jaundice.
3. Increase level of Homocysteine increase risk of atherosclerosis
4. Telomerase inhibitors can be use in treatment of malignancy.
5. "CK-MB is more significant marker than LDH & S.GOT for diagnosis of Myocardial infarction" explain it.
6. "Vitamin C deficiency cause Scurvey" Explain it.

**Q:6 Write answer in few line (5 out of 6)** **(05 Marks)**

1. Co-Enzyme
2. Micelle
3. Effect of Temperature on enzyme activity
4. Source of Vitamin B12
5. Bile salts are detected in the urine, in case of obstructed jaundice
6. Type of Mutation