

**BIOCHEMISTRY 2**  
**SUMMER 2016**

**Total Marks 40**

**SECTION -B SAQ(24 Marks)**

2. Short answer questions (Any six out of seven) (6x4=24)

a) State biomedical importance of

- i) Cholesterol
- ii) Hyaluronic acid

b) An apparently healthy man, on a routine check up was found to have fasting blood glucose of 80 mg/dl, urine showed no abnormal constituents. Two hour after heavy breakfast his blood glucose was 185 mg/dl and urine was positive for Benedict's test.

- i) What is the probable diagnosis?
- ii) Enlist two conditions in which you find glucose in urine and why
- iii) State the normal level of blood glucose, renal threshold and TMG (Tubular Maximum for Glucose)

c) Abnormal hemoglobins

d) A 40 years old woman admitted with recurrent pain in the abdomen developed jaundice two days after admission History revealed that the pain aggravated after intake of fatty food. The patient was also complaining of itching. A routine urine examination showed presence of bile salts but urobilinogen was absent

i) Which type of jaundice patient was suffering from?

ii) Explain the biochemical basis findings in urine

ii) Which blood tests are to be done in the patient and what could be the probable findings?

e) Conjugation

f) Blood buffers

g) Tumour markers

**SECTION C**

LAQ (16 Marks)

Long answer questions : (Any two out of three (2x8=16))

a) Describe hormonal regulation of normal blood glucose level. Add a note on glycosuria.

b) State the major steps of cholesterol synthesis. Name the regulatory enzyme in this pathway. What is the normal level of serum cholesterol and explain its role in atherosclerosis.

c) Enumerate the liver function tests and describe the liver function tests based on excretory function.