

BIOCHEMISTRY 1
MAY/JUNE 2015

SECTION-B (SAQ)

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

- a) Explain the pattern of various enzymes and isoenzymes in myocardial infarction
- b) Write a note on point mutations and their effects.
- c) A 55 year old man came to the orthopedic OPD with complaints of pain, redness and swelling in the left great toe. Investigations revealed serum uric acid concentration of 10 mg/dl.
 - i) What is the probable diagnosis?
 - ii) Describe the various types of this disease
 - iii) Mention the drug that can be used to treat this and explain its mechanism of action of action.
- d) Explain oxidative phosphorylation. Write a note on thermogenin
- e) Draw a neat labelled diagram of the common features of an immunoglobulin molecule. Describe any one immunoglobulin in detail.
- f) Describe the secondary structure of proteins with suitable examples
- g) Define the terms Basal Metabolic Rate(BMR) and specific dynamic action of food. Explain how various factors affect BMR.

SECTION-C-(LAQ)

3. Long answer question (Any two out of three) (2X8=16)

- a) Explain the formation and fate of ammonia in the body
- b) Explain the process of catabolism of heme. Write a note on causes and biochemical findings in hemolytic jaundice.
- c) Explain the absorption, biochemical roles deficiency manifestations of cobalamin (Vitamin B12) and folic acid