

500-B

M.B.B.S. DEGREE EXAMINATION – NOVEMBER, 2014
FIRST M.B.B.S. EXAMINATION
BIOCHEMISTRY
PAPER-II

Time : 2 ½ Hours

Max. Marks : 50

Answer all questions

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- 1) A 15 year old boy complained of swelling and pain in the distal phalangeal joints. Blood investigation showed the following results. 1+1+4+4=10
Blood urea : 15 mg%
Serum uric acid : 16 mg%
On diagnosing the pathology, the physician decided to treat patient with allopurinol
i) What is your probable diagnosis in the above patient?
ii) Which 2 other blood investigations would you suggest?
iii) Comment on the serum uric acid level and explain the cause of pain in joints.
iv) What is the biochemical explanation for the treatment given in the above patient?
- 2) Discuss the metabolism of glycine under the following headings. 3+3+4=10
i) Synthesis ii) Catabolism
iii) Specialized compounds synthesized
WRITE SHORT NOTES ON: 5x4=20
- 3) Explain the absorption, transport and storage of dietary iron in the body.
- 4) Give an account of post transcription modifications
- 5) Describe PCR with diagram and list out two uses of it.
- 6) Compare and contrast (1 similarity and 2 differences) DNA polymerase and RNA polymerase
- 7) Compare and contrast (1 similarity and 2 differences) prehepatic and post hepatic jaundice
WRITE BRIEFLY ON: 5x2=10
- 8) Azaserine is used as an anticancer agent
9) Wilson's disease
10) Oxalates in diet inhibit absorption of iron and calcium
11) Metabolic acidosis
12) Serum alpha fetoprotein and carcinoembryonic antigen
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