

21/05/16

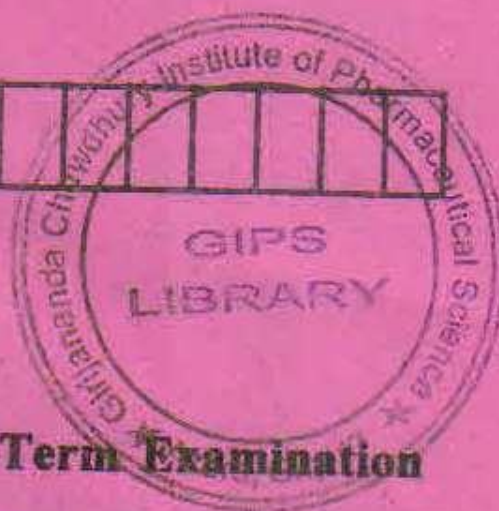
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2016



**B. Pharm 6th Semester End-Term Examination**

**BIOCHEMISTRY**

**Full Marks-100 Pass Marks-35 Time-Three hours**

The figures in the margin indicate full marks  
for the questions.

1. Answer any *ten* questions : 10×3=30
- (a) Clinical application of enzymes
  - (b) Standard free energy of ATP
  - (c) Transamination
  - (d) Co-enzymes
  - (e) Lipoproteins
  - (f) Unsaturated fatty acids
  - (g) RNA polymerase
  - (h) Regulation of glycolysis

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- (i) Uncoupling agent of electron transport chain  
(j) t-RNA  
(k) Essential amino acids  
(l) Mutation.

2. Answer any *eight* questions. Each question carries 5 marks :  $8 \times 5 = 40$

- (a) Enzyme inhibition  
(b) Inhibitors of electron transport chain  
(c) Pentose phosphate pathway  
(d) Urea cycle  
(e) Genetic code  
(f) Metabolism of Ketone bodies  
(g) DNA replication  
(h) Nitrogen balance  
(i)  $\beta$ -oxidation of fatty acid  
(j) Gluconeogenesis.

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(2)

3. Answer any *three* questions. Each question carries 10 marks :  $3 \times 10 = 30$

- (a) How is pyruvate enzymatically converted to acetyl Co-A? Draw and explain the tri-carboxylic acid (TCA) cycle. Calculate how many ATP are generated in this cycle.

$2+7+1=10$

- (b) What do you mean by 'Central dogma'? Describe the different stages of protein biosynthesis with neat diagrams. Mention the inhibitors of translation.

$1+8+1=10$

- (c) Define enzyme and enlist the different factors those affect enzyme reaction. Briefly explain the 'enzyme kinetics'.

$1+3+6=10$

- (d) Write a note on Metabolism of proteins.

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(3)

120(P)