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Total No. of Pages : 02

Total No. of Questions : 24

**B.Pharma (2012 to 2016) (Sem.-5)**  
**PHARMACEUTICAL CHEMISTRY-V**  
**(Biochemistry)**

Subject Code : BPHM-501

M.Code : 70427

Time : 3 Hrs.

Max. Marks : 80

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

**SECTION-A****Discuss brief :**

1. What is the effect of pH and temperature on enzyme activity?
2. Ketone bodies
3. Sphingolipids
4. Gluconeogenesis
5. Function of tRNA
6. How bilirubin is conjugated?
7. Explain the amphibolic role of kreb's cycle.
8. What is allosteric modification of enzyme? Give example.
9. Discuss one glycogen storage disorder.
10. What are the sources of carbon and nitrogen in pyrimidine ring?



11. What is the significance of HMP pathway?
12. Define Coenzyme and Cofactor.
13. Mention various pathways where glucose-6-phosphate can enter.
14. Name essential fatty acids and write their role.
15. What are the inhibitors of protein synthesis? Give examples.

#### SECTION-B

16. Write in details about  $\beta$ -oxidation of fatty acid.
17. What is oxidative phosphorylation? Explain rotary motor model for ATP generation.
18. How heme synthesis is regulated?
19. Give the synthesis of various prostaglandins and their biochemical actions.
20. What is recombinant DNA technology? Give its applications.

#### SECTION-C

21. What is enzyme inhibition? Explain in detail about reversible inhibitions along with examples.
22. Explain in detail about the biosynthesis of purine ribonucleotides.
23. Define Transcription. Explain various steps involved in this process?
24. a) Explain in detail the aerobic metabolism of glucose.  
b) Define Genetic Code. Give various characteristics of genetic code.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**