

SUBJECT : ELECIIVE: a) MICROBIAL METABOLISM

Day : Tuesday
Date : 16/04/2019

Time : 03.00 PM TO 06.00 PM
Max. Marks : 60

S-2019-1222

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1** Explain in details glucose metabolism with reference to any two of the following: [15]
- i) Synthesis of glucose (Gluconeogenesis)
 - ii) Hormonal regulation
 - iii) ATP formation and energetics

OR

Write the biochemical pathway to explain pyrimidine synthesis.

- Q.2** a) Write the flowsheet and net reaction of β oxidation of fatty acid. [08]
- b) Explain in brief about compartmentation in enzyme regulation [07]
- Q.3** Answer the following any **THREE**: [15]
- a) How is Acetyl CoA utilised in a cell?
 - b) What are cytochromes? Give their significance in ETC
 - c) Write an overview of oxidative energy generation
 - d) Write the biochemical mechanism of heterolactic fermentation
- Q.4** Write notes on any **THREE**: [15]
- a) ATP as high energy compound
 - b) Glycogen degradation
 - c) Metabolism
 - d) Triacylglyceride synthesis

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