

QP CODE: 4209 (CBCS)

PITHAPUR RAJAH'S GOVERNMENT COLLEGE (AUTONOMOUS), KAKINADA
IV-SEMESTER END EXAMINATIONS-MARCH/APRIL-2018

II YR B.Sc., SUBJECT/ PAPER: MICROBIOLOGY (NEW)

MICROBIAL PHYSIOLOGY & GENETICS

DATE: 06.04.2018 (FRIDAY) TIME: 09.00 AM

Marks: 70

Reg. No.

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Duration: 3 Hrs

PART-A

Answer all the following questions

5x2=10M

1. Carotenoids and Phycobilins
2. Denitrification
3. Modern concept of gene
4. Restriction endonucleases
5. Oxidative phosphorylation

PART-B

Answer any five of the following questions

5x4=20M

6. Alcohol fermentation
7. Photosynthetic apparatus in prokaryotes
8. Sulphate respiration
9. ED pathway
10. Features of genetic code
11. Types of genes
12. Different types of vectors
13. Applications of genetic engineering in medicine

PART-C

Answer any four of the following questions

4x10=40M

- 14.a.) Explain lactic acid fermentation
Or
b.) Discuss oxygenic photosynthesis in bacteria
- 15.a.) Write about the sequential steps in glycolysis
Or
b.) Give an account of T.C.A cycle
- 16.a.) Explain different types of RNA and their function
Or
b.) Discuss the mechanism of protein synthesis with neat labelled diagrams
- 17.a.) Give an account of PCR technique
Or
b.) Write all steps in gene cloning