

PD-396
(573) M.Sc. MICROBIOLOGY (THIRD SEMESTER)
Examination Dec.-2020
Compulsory/Optional
Group -
Paper - IV

Name/Title of Paper- ENZYMOLOGY AND INDUSTRIAL MICROBIOLOGY

Time:- Three Hours

Maximum Marks- 080

Minimum Passing Marks-029

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

Section-A

1. Explain the following:	1x10=10
(a) Isoenzyme?	
(b) Define enzyme inhibition?	
(c) Action of ribo nuclease?	
(d) Coenzyme catalysis?	
(e) Feedback mechanism?	
(f) Substrate inhibition?	
(g) Monod's model?	
(h) Biopolymers?	
(i) Enzyme sensor?	
(j) Biopesticides ?	
2. Answer the following in brief:	2x5=10
(a) Write a note on effect of pH.	
(b) Application of microbial enzyme.	
(c) Write about sequential utilization.	
(d) Write a note on secondary metabolite.	
(e) Thermo-stable enzyme.	

Section-B

Answer all questions: **15x4=60**

Unit-I

3. Describe in detail the methods for determination of enzyme activity.

Or

Write notes on:-

(a) Temperature inhibitors	(b) Allosteric enzymes
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Unit-II

4. Describe in detail the action of ribonuclease and chymotrypsin.

Or

Write notes on:-

(a) Microbial enzymes in leather	(b) Enzymes in industry
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Unit-III

5. Write an assay on selection improvement and maintenance of industrial strains.

Or

Write notes on:-

(a) Recombinant microorganisms	(b) Substrate and toxic inhibition
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Unit-IV

6. Write an essay on bio fuels.

Or

Write notes on:-

(a) Bio preservatives	(b) Antibiotics
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