

**B.Sc. (New CBCS) Semester VI Examination  
MICROBIOLOGY**

27 AUG 2020

: નોંધ :

૧. દરેક પ્રશ્નનો [a] અથવા [a(i)] અને [a(ii)] ૧ લખવાના રહેશે.  
૨. પ્રશ્ન : ૧[a] અથવા ૧[a(i)] અને ૧[a(ii)] તથા ૨[a] અથવા ૨[a(i)] અને ૨[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૮ માર્ક્સ રહેશે.  
૩. પ્રશ્ન : ૩[a] અથવા ૩[a(i)] અને ૩[a(ii)] તથા ૪[a] અથવા ૪[a(i)] અને ૪[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૭ માર્ક્સ રહેશે.  
૪. દરેક પ્રશ્નનો પ્રશ્ન નં ૧(b), પ્રશ્ન નં ૨(b), પ્રશ્ન નં ૩(b) તથા પ્રશ્ન નં ૪(b) (ટુંકા પ્રશ્નો) વિદ્યાર્થીએ લખવાના નથી.

Q.1 (A)	Discuss: Methods of enumeration of viruses.	14
OR		
Q.1(A)(i)	Discuss: General characteristics of viruses.	07
Q.1(A)(ii)	Explain: Cultivation of virus in animal and embryonated eggs.	07
Q.1 (B)	Short Questions (Attempt any FOUR)	04
	1) What are cytopathic effects?	
	2) What is the difference between viroid and virusoid?	
	3) Define: Finite cell lines.	
	4) What are prions?	
	5) What is persistent and latent virus infection?	
	6) What is the importance of cultivation of animal virus?	
Q.2 (A)	Explain: Lysogenic cycle in lambda phage.	14
OR		
Q.2 (A)(i)	Explain: One step growth curve.	07
Q.2(A)(ii)	Discuss: Pathogenicity of HIV.	07
Q.2(B)	Short Questions (Attempt any FOUR)	04
	1) What is the function of movement protein in TMV?	
	2) How is T <sub>4</sub> phage DNA different from DNA of other T-even phages?	
	3) Why is vaccine against HIV not available?	
	4) Which regulatory proteins are associated with control of lytic and lysogenic state?	
	5) Which structural genes are present in HIV?	
	6) Enlist structural components of T <sub>4</sub> phage.	
Q.3(A)	Discuss: Various aspects of fungal nutrition.	14
OR		
Q.3(A) (i)	Explain: Primary and secondary metabolites of fungi with its importance.	07
Q.3(A)(ii)	Discuss: Downy mildew in plants.	07
Q.3(B)	Short Questions (Attempt any THREE)	03
	1) Name the causative agent of rust of wheat.	
	2) Name somatic structures of fungi.	
	3) Explain the terms: Saprotrophic fungi and parasitic fungi.	
	4) In what way are fungal cultivation media different from other nutritional media?	
	5) What is the striking usefulness of slide culture technique?	
Q.4(A)	Discuss: Structure, habitat and reproduction of fungi belonging to <i>Ascomycetes</i> .	14
OR		
Q.4(A) (i)	Explain: Asexual methods of reproduction in fungi.	07
Q.4(A)(ii)	Write on: Slime molds.	07
Q.4(B)	Short Questions (Attempt any THREE)	03
	1) What is plasmogamy?	
	2) What is dolipore septum?	
	3) Why are fungi belonging to <i>Deuteromycetes</i> called as 'imperfect fungi'?	
	4) Enlist sexual methods for reproduction of fungi.	
	5) Give two examples of <i>Basidiomycetes</i> fungi.	

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