

B. Sc. Sem. II

28 OCT 2020

Sub. Code. 20609

: નોંધ :

Microbiology

૧. દરેક પ્રશ્નનો [a] અથવા [a(i)] અને [a(ii)] જ 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.

(b) Draw neat, clean and labeled diagram wherever necessary.

Q.1(A)	Explain sporulation in detail.	14
	OR	
Q.1(A) (i)	Write on: Capsule	07
Q.1(A)(ii)	Write on: Types of flagella	07
Q.1(B)	Short Questions (Attempt any FOUR) 1) Give functions of cell wall. 2) Give two examples of gram negative bacteria. 3) What is spore? 4) What is prosthecae? 5) Enlist bacterial internal structures. 6) Give two functions of cell envelope.	04
Q.2(A)	Discuss various types of media in detail.	14
	OR	
Q.2(A) (i)	Discuss: Various gaseous requirements for cultivation of bacteria.	07
Q.2(A)(ii)	Discuss: Nutritional requirements of bacteria.	07
Q.2(B)	Short Questions (Attempt any FOUR) 1) Define: Chemotrophs 2) Enlist various physical conditions require for growth. 3) Give two examples of Thermophiles. 4) Define: Plasmolysis 5) Give Two example of phototrophs. 6) Which are common ingredients for media preparation?	04
Q.3(A)	Explain various methods for obtaining pure culture.	14
	OR	
Q.3(A) (i)	Write on: Ideal characteristics of antimicrobial agent.	07
Q.3(A)(ii)	Write on: Dye as Microbial control.	07
Q.3(B)	Short Questions (Attempt any THREE) 1) Define: Bacteriostatic 2) Give two names of antimicrobial agents. 3) What is axenic culture? 4) Give role of Phenol. 5) What is ATCC?	03
Q.4(A)	Discuss Bergey's Manual of Systematic Bacteriology Ed. II.	14
	OR	
Q.4(A) (i)	Give over view on three domain concept.	07
Q.4(A)(ii)	Give principles of binomial system of nomenclature.	07
Q.4(B)	Short Questions (Attempt any THREE) 1) Enlist Whittaker's five kingdom. 2) What is Taxonomy? 3) What is numerical Taxonomy? 4) Define: Biovars 5) What is Taxonomic rank?	03

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