

#### . MEDICAL

[BSCN 1024] OCTOBER 2024 Sub. Code: 2308

### B.Sc. (Nursing) DEGREE EXAMINATION

# THIRD SEMESTER PAPER VI – APPLIED MICROBIOLOGY AND INFECTION CONTROL INCLUDING SAFETY

Q.P. Code: 652308

Time: Three Hours Maximum: 75 Marks

Answer Section A and Section B Separately

Answer all the Questions

SECTION – A (37 Marks)

(APPLIED MICROBIOLOGY)

I.	. Multiple Choice Questions:				$(6 \times 1 = 6)$
	1.	Organ of locomotio A) Slime layer	n in bacteria is B) Flagella	C) Fimbria	D) Capsule
	2.	Human anatomical A) Yellow bag	, 0		
	3.	Which antibody app A) IgA	ears first after infect B) IgG	ion?	D) IgM
	4.	Western blot is cont A) Hepatitis B	firmatory test for: B) HIV	C) Syphillis	D) Leptospirosis

6. Predisposing factors for fungal infection are all EXCEPT

Primary amoebic meningoencephalitis is caused by

A) Post transplantation

A) Acanthamoeba

B) Neutropenia

B) Balamuthia C) Naegleria

C) Malignancy

D) Immunocompetent state

II. Essay:  $(1 \times 10 = 10)$ 

Write in detail about morphology, pathogenesis and laboratory diagnosis of Vibrio cholera.

III. Short answer:  $(3 \times 5 = 15)$ 

- 1. Life cycle of Malarial parasites.
- 2. Dengue virus.
- ELISA.

### IV. Very short answers:

 $(3 \times 2 = 6)$ 

D) E.histolytica

- Modes of transmission of Hepatitis viruses.
- Enumerate various types of hypersensitivity reaction.
- Enumerate opportunistic fungal pathogens.



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## SECTION - B (38 Marks) (INFECTION CONTROL INCLUDING SAFETY)

I.	Mu	Iltiple choice Questions: $(7 \times 1 = 7)$		
	1.	Geobacillus stearothermophilus bacteria is used as biological indicator in A) Hot air oven B) Autoclave C) Incubator D) Filtration		
	2.	Stents is sterilized by A) Glutaraldehyde B) Autoclave C) Hot air oven D) Ethylene oxide sterilizer		
	3.	How many moments for hand hygiene as per WHO recommendation? A) 8 B) 5 C) 6 D) 4		
	4.	All of the following are component of droplet infection except  A) N-95mask B) Cohorting C) Respiratory hygiene D) Restricted visitors		
	5.	Blood bags should be collected in which colour bag?  A) Yellow B) Red C) Blue D) White		
	6.	The following chemical is high level disinfectant  A) Hypochorite solution B) Phenol C) Chlorhexidine D) Peracetic acid		
	7.	Hand wash should be performed for atleast A) 20 seconds B) 30 seconds C) 40 seconds D) 10 seconds		
II.	Es	say: $(1 \times 10 = 10)$		
	1.	Define sterilization. Enumerate various physical methods of sterilization. Discuss in detail about Autoclave and its various sterilization control.		
III. Short answers: $\sqrt{3} \times 5 = 15$				
	2.	Hand hygiene. Airborne infection control measures. Needle stick injury.		
IV. Very short answers:				
	2.	What is the various Health Care Associated Infection? Fire safety.		
	٥.	Blood spill management.		
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