Code/N/155

B.Sc. Nursing Third Semester Feb.- March Examination-2026

[Time: 03:00 Hrs.] Subject – Applied Microbiology & Infection Control [Max. Marks: 75]

Section-A (Applied Micobiology) Marks: 37 Marks

1. Mention various antigen-antibody reactions. List down general features of antigen-antibody reacton. (10)

2. **Short answer question (any 3)** (5x3=15)
(a) Sources of infection (b) Precipitation reaction (c) Ziehl- Neelsen method (d) Immunization schedule

3. **Very short answer questions –** (2x3=6)
(a) Write the name of any two auto immune disease. (b) Characteristics of passive immunity.
(c) Name four killed (inactivated) vaccines.

4. **MCQ -** (1x6=6)
(I) Pasteurization was invented by –
(a) Twort (b) Peyton Rous (c) Louis Pasteur (d) Jenner
(II) _____ is the only maternal immunoglobulin that is normally Transported across the placenta and provides natural passive immunity.
(a) IgA (b) IgD (c) IgG (d) IgM
(III) Shape of COCCI are –
(a) Spherical shape (b) Spiral shape (c) Rod shape (d) Curved rod shape
(IV) The SARS pandemic occurred in –
(a) 1983 (b) 1993 (c) 2003 (d) 2005
(V) Infection occurring in hospital is termed as –
(a) Focal infection (b) Nosocomial infection (c) Primary infection (d) Latent infection
(VI) The mosquitoes through which Dengue fever is transmitted is –
(a) Anopheles (b) Culex (c) Mansoni (d) Aedes

Section-B (Infection Control & Safety) Marks: 38 Marks

1. Define disinfection and sterilisation. Briefly discuss about the principles of various types of specimen collection? (4+6=10)

2. **Short answer question (any 3)** (5x3=15)
(a) Define root cause analysis (RCA) and list the steps of RCA.
(b) What are the safety precautions to be taken while handling specimen.
(c) What do you understand by active and passive immunity.
(d) Mention three characteristics of gram positive and gram negative bacilli.

3. **Very short answer question (any 3)** (2x3=6)
(a) Discuss on identification of disease producing virus.
(b) Name any two examples of organism that are resistant to antimicrobial drug.
(c) Define safety protocols and mention the 5S.
(d) Define needle stick injury and post exposure prophylaxis.

4. **MCQ –** (1x7=7)
(I) _____ fungi division includes 'Club fungi' ?
(a) Zygomycota (b) Deuteromycota (c) Basidiomycota (d) Ascomycota
(II) The largest virus is
(a) Dhori virus (b) Mini virus (c) Mosaic virus (d) Coxsackie virus
(III) Elevated levels of chlorine indicate the condition of
(a) Heart failure (b) Lung disease (c) Addison disease (d) Cystic fibrosis
(IV) _____ is the waste treatment method for biomedical waste
(a) Incineration (b) Chemical disinfection (c) Solid waste (d) Cytotoxic drugs
(V) The leakage of IV fluid or medication into the surrounding tissue causes_____
(a) Extravasation (b) Phlebitis (c) Infection (d) Infiltration
(VI) Code_____ is the most commonly used emergency code that indicates a medical emergency
(a) Red (b) Blue (c) Purple (d) Grey
(VII) The process of weakening a pathogen is called as _____
(a) Vaccination (b) Attenuation (c) Immunization (d) Virulence reduction

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