

PART – A

[5]

1. Fill in the blanks: [5x0.5=2.5]
- a) The word chemotherapy was introduced by.....
 - b) Chemical substances applied on living surfaces.....
 - c) Chitin and chitosan are used as.....in fish health management
 - d) Prevent physical injury and reduce metabolism during transportation of fish.....
 - e) FDA approved drug against enteric septicemia of catfish.....
2. Matching Table: [5x0.5=2.5]

a) Rifamycin	i) Cell membrane disruptor
b) Cephalosporins	ii) Inhibit topoisomerases
c) Quinolones	iii) Inhibit RNA polymerase
d) Polymixin	iv) Flesh color enhancers
e) Carotenoids	v) Inhibit cell wall synthesis

PART – B

[10]

3. Choose the correct answer or True/ False statement: [5x1=5]
- a) Immunostimulant muramyl dipeptide is a purified form of mycobacteria []
 - b) Formalin contains 50 % formaldehyde gas in aqueous solution []
 - c) Prior to static treatment of fish the stocking density must be decreased []
 - d) Live attenuated vaccines are recommended for immunosuppressed fish []
 - e) Bleaching powder is used to control weed and predatory fish []
4. Differentiation or define or abbreviations or statement: [5x1=5]
- a) Expand the acronym “AMR”
 - b) Expand the acronym “MS-222”
 - c) Difference between disinfectant and antiseptic
 - d) Difference between bactericidal and bacteriostatic agents.
 - e) What is a therapeutic index

PART – C (Answer any Three)

[3x5=15]

5. Write a brief note on different types of disinfectants used in aquaculture? [5]
6. Define immunostimulants and discuss about use of immunostimulants in aquaculture? [5]

7. Explain the principle of vaccination and give an account on different types of vaccines used in aquaculture? [5]
8. What are antibiotics and explain the different types of antibiotics used in aquaculture? [5]
9. Explain about Antiparasiticides used in aquaculture? [5]
10. Write short notes on any **One**:-
 - a) Antimicrobial Resistance
 - b) General treatment guidelines for treatment of the fish