

- o) Microorganisms that prefer salt concentration for their survivability are known as :
- i) Halophiles. ii) Acidophiles. iii) Alkalophiles. iv) All of the above.
- p) Which of the following infections is / are caused by haemophilus influenzae?
- i) Meningitis. ii) Acute epiglottitis. iii) All of the above. iv) None of the above.
- q) Temperature & time period used in hot air oven is :
- i) 160°c for 2 hours. ii) 140°c for 2 hours. iii) 160°c for 1 hour. iv) None of the above.
- r) TSI agar medium contains all the following carbohydrates except :
- i) Glucose. ii) Lactose. iii) Sucrose. iv) Mannitol.
- s) Glasswares are sterilized in :
- i) Autoclave. ii) Hot air oven. iii) Micro oven. iv) Flaming.
- t) Selective media for meningococcus is :
- i) Blood agar. ii) Deoxycholate citrate media.
 iii) Thayer – Martin media. iv) McLeod media.

2. Answer the following questions :

5 x 2

- a) Types of flagella.
 b) Enriched media.
 c) Capsule.
 d) Inspissation.
 e) Quellung reaction.



3. Answer **any six** of the following :

6 x 5

- a) Principle of Gram stain & its importance.
 b) Widal Test.
 c) Hot air oven.
 d) Write short note on transduction.
 e) Sporulation.
 f) Bacterial Growth Curve.
 g) Culture media.
 h) Describe the various mechanisms by which Esch. Coli. produces diarrhea.

4. Answer **any one** question :

1 x 10

- a) List the bacteria causing UTI. Write down the laboratory diagnosis of UTI.
 b) Write down the pathogenesis of Streptococcus pyogenes. Write down the culture characteristics of Staphylococcus aureus.

5. Answer **any two** questions :

- a) What is sterilization? How sterilization differs from disinfection? Write down the methods of sterilization. What is the principle of autoclaving? Sterilization of which items is done by this method? 1+2+4+5+3
- b) Discuss pathogenesis and lab diagnosis of gonorrhoea. 5+10
- c) Discuss pathogenesis of Staphylococcus infection and its lab diagnosis. Write lab diagnosis of enteric fever. 4+6+5