Salahaddin University-Erbil College of Science

Department of Biology
$4^{\text {th }}$ Year Students


Subject: Practical Food Microbiology
Q.1) Compare between Pasteurization \& D-Value?
Q.2) Can we control contamination in our foods? How or Why?
Q.3) By using total colony count we found that the no. of yeast=2*108 yeast/Liter, the table below shown the results, Find the value of lost colony?

| $10^{-2}$ | 190 | 150 | $?$ |
| :--- | :--- | :--- | :--- |
| $10^{-3}$ | 45 | 15 | 55 |

Q.4) What is the principle of Resazurin reduction test?

Q5/ We have different methods of food preservation, ranking them (from your view).
Q.6) Pasteurization
a. reduces the total microbial population.
b. usually eliminates all disease causing organisms.
c. both A and B
d. neither A nor B
Q.7) Write the purpose for using coliform plate count in food microbiology.
Q.8) Compare between Dye reduction test \& direct epifluorescent filter technique
Q.9) What is the reasons of Using diluents with solid food samples in direct microscopic count.
Q.10) We can't clean milk from spore forming bacteria Why?
Q.11) Using liquid medium in coliform plate count Why?
Q.12) Taste \& odor change during spoilage of food why?
Q.13) By using different methods of counting bacteria from food samples, we get same results or no? Explain it.
Q.14) Dye reduction test performed for raw milk why?
Q.15) Compare between MPN and Coliform plate count?
Q.16) What are the reasons of Using 25 g of food sample for bacteriological analysis?
Q.17) Food poisoning is part of food borne disease why?

Q18) We found that the no. of bacteria $=10^{9}$ in one liter of milk, the counting performed by direct microscopic count. Calculate number of bacteria in one microscopic field? Calculate number of yeast in 1 g of sample if the results was as follow:-

| $10^{-2}$ | 301 | 315 | 332 |
| :--- | :--- | :--- | :--- |
| $10^{-3}$ | 50 | 60 | 70 |
| $10^{-4}$ | 28 | 25 | 29 |

Q19)What is the purpose of pasteurization?
Q20) What is the principle of Most Probable Number test
Q21)During sampling of food the sample should be examined within 24 hr .?
Q22) What is the principle of Most Probable Number test?
Q23) How do microorganisms get into food?

Q24) Answer the following briefly.
Q25) Distill water doesn't use as diluent in food microbiology?
Q26) Can bacteria survive in Pasteurized milk?
Q27) What factors affect the quality of meat?
Q28) Which one of the following statem,ents best describes the effect that food poisoning bacteria usually have upon food?
(a) It appears normal but it tastes horrible.
(b) It appears stale and dry and it has an 'off' taste.
(c) It tastes, smells and looks normal.
(d) It appears and tastes normal but it has an unpleasant smell.

Q29) Which one of the following bacteria causes the greatest number of cases of food poisoning?
(a) Clostridium perfringens
(b) Listeria
(c) Staphylococcus aureus
(d) Salmonella

Q30) The main symptom of Staphylococcus food poisoning is:
(a) vomiting
(b) diarrhoea
(c) fever
(d) abdominal pains

Q31) If food is reheated, to what temperature and for how long should it be heated?
(a) $70^{\circ} \mathrm{C}$ for 2 minutes
(b) $50^{\circ} \mathrm{C}$ for 2 minutes
(c) $50^{\circ} \mathrm{C}$ for 10 minutes
(d) $30^{\circ} \mathrm{C}$ for one hour

Q32) What are the symptoms of food poisoning?
Q33) Name three causes of food poisoning apart from bacteria.
Q34) Name three conditions which bacteria need to grow/multiply.

