

TELANGANA UNIVERSITY
S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029)
VI SEMESTER INTERNAL ASSESSMENT I & II EXAMINATIONS
MICROBIOLOGY QUESTION BANK

- 1. The best medium for the production of Penicillin is**
 - a. Nutrient agar
 - b. Corn steep liquor
 - c. Sulfite waste liquor
 - d. Whey
- 2. Industrially important Antibiotic producing organisms shall be isolated by**
 - a. Disk plate method
 - b. Direct plate method
 - c. Serial dilution method
 - d. Crowded plate method
- 3. Industrial alcohol will be produced by using starter culture**
 - a. Top yeast
 - b. Middle yeast
 - c. Bottom yeast
 - d. Feeder yeast
- 4. Pyruvate decarboxylase acetaldehyde + CO₂ = This reaction is specially observed in**
 - a. Lactic acid fermentors
 - b. Ethanol fermentors
 - c. Algae
 - d. Plants
- 5. The pyruvate, dehydrogenase → multi-enzyme complex does not occur in**
 - a. Aerobic bacteria
 - b. Microphilic bacteria
 - c. Facultative anaerobic bacteria
 - d. Strictly anaerobic bacteria
- 6. A major ingredient of penicillin production media is**
 - a. Corn meal
 - b. Corn steep liquor
 - c. Cane steep liquor
 - d. None of these
- 7. the outstanding example of traditional microbial fermentation product is**
 - a. Vinegar
 - b. Penicillin
 - c. Citric acid
 - d. Tetracyclin
- 8. Which of the following involves the formation of nitrate from ammonia**
 - a. Ammonification
 - b. Denitrification
 - c. Nitrification
 - d. Nitrogen fixation
- 9. First genetically engineered and biotechnologically produced vaccine was against**
 - a. AIDS
 - b. Small pox
 - c. Herpes simplex
 - d. Hepatitis B.
- 10. one of the standard cloning vector widely used in gene cloning is**
 - a. Ti plasmid
 - b. EMBL 3
 - c. pBR 322
 - d. EMBL 4
- 11. In alcoholic fermentation, CO₂ is evolved during**
 - a. Decarboxylation of pyruvic acid
 - b. Formation of acetaldehyde
 - c. Oxidation of acetaldehyde
 - d. Both a and b

- 12. In the industrial production of streptomycin, the secondary metabolite or by-products is**
- Vitamin – B₁₂
 - Vitamin – C
 - Vitamin – B₆
 - Ethanol
- 13. Tobacco and tea leaves are fermented to give flavour and taste. This type of fermentation is known as**
- Alcohol fermentation
 - Curing
 - Degradation
 - Lactic acid fermentation
- 14. Vinegar fermentation involves**
- Yeasts only
 - Yeasts with lactic bacteria
 - Yeasts with acetic acid bacteria
 - Yeasts with butric acid bacteria
- 15. Carcinoma refers to**
- Malignant tumours of the connective tissue
 - Malignant tumors of the skin or mucous membrane
 - Malignant tumours of the colon
 - Malignant tumors of the connective tissue
- 16. By-product of acetone-butanol fermentation include**
- Riboflavin
 - Penicillin
 - Isopropanol
 - All of these
- 17. Transgenic animals are for improvement of the quality of**
- Milk
 - Meat
 - Eggs
 - All of the above
- 18. Thermo resistant bacteria are important in the preservation of foods by**
- Freezing
 - Canning
 - Chemicals
 - Irradiation
- 19. The fungus used in the industrial production of citric acid:**
- Rhizopus Oryzac
 - Fusarium moniliformae
 - Rhizopus nigricans
 - Aspergillus nigricans
- 20. Penicillin is commercially produced by**
- P.notatum
 - P.chrysogenum
 - P.citrinum
 - P.roquefortii
- 21. The most commonly used microorganism in alcohol fermentation is**
- A spergilus niger
 - Bacillus subtilis
 - Sacharomyces cerevisiae
 - Escherichia coli
- 22. Vitamin B₁₂ can be estimated and determined by using organism**
- Lactobacillus sps
 - Lactobacillus Leichmanni
 - Bacillus subtilis
 - E.Coli
- 23. Batch fermentation is also called**
- Closed system
 - Open system
 - Fed-Batch system
 - Sub-merger system
- 24. To differentiate lactose and non-lactose fermentors the medium used is**
- Mac Conkey's medium
 - Stuart's medium
 - Sugar medium
 - Citrate medium
- 25. The micro-organism useful for fermentation are**
- Bacteria
 - Yeast
 - Fungi
 - None of these
- 26. Industrial microbiology, mainly depends on the phenomenon**
- Pasteurisation
 - Fermentation
 - Vaccination
 - Both b and c
- 27. Streptokinase is also termed as**
- Fibrinolysin
 - Catalase
 - Coagulase
 - Hyaluronidase
- 28. Streptokinase is produced by**
- Staphylococcus aureus
 - Streptococcus pneumoniae
 - Str. faecalis
 - Str. pyogenes

- 29. Large vessel containing all the parts and condition necessary for the growth of desired microorganisms is called**
- Bio reactor
 - Auto reactor
 - Impeller
 - None of these
- 30. Basic principle in industrial microbiology is**
- Suitable growth conditions
 - Fermentation
 - Providing aseptic conditions
 - All of these
- 31. For thorough mixing of medium of medium and inoculum the part of fermentor useful is**
- Shaft
 - Headspace
 - Impeller
 - Sparger
- 32. Infermentor the top portion left without broth is called**
- Shaft
 - Head space
 - Impeller
 - Sparger
- 33. Over heating of fermentator during fermentation is controlled by**
- Cooling jacket
 - Steam
 - Cool air
 - None of these
- 34. Antifoam agent is**
- Silicon compounds
 - Corn oil
 - Soyabean oil
 - All of these
- 35. The capacity of laboratory fermentors is**
- 12–15 liters
 - 2000 gallons
 - 500 liters
 - 10000 gallons
- 36. For the production of ethanol the raw material used is**
- Molasses
 - Cellulose
 - Sulphite waste liquor
 - None of these
- 37. Different methods of strain improvement are**
- Protoplast fusion
 - Recombinant DNA technique
 - Genetic recombination
 - All of these
- 38. Protoplasts can be prepared from**
- Gram positive bacteria
 - Gram negative bacteria
 - Both a & b
 - None of these
- 39. Upto the production of desirable production in the fermentor is called**
- Upstream process
 - Downstream process
 - Surface fermentation
 - None of these
- 40. The purification and recovery of the production after fermentation is called**
- Upstream process
 - Downstream process
 - Surface fermentation
 - None of these
- 41. If the microorganisms are allowed to nutrient medium is called**
- Submerged fermentation
 - Surface fermentation
 - Dual fermentation
 - All of these
- 42. Submerged fermentations are**
- Batch fermentation
 - Continuous fermentation
 - Both a and b
 - None of these
- 43. Batch fermentation is also called**
- Closed system
 - Open system
 - Fed-batch system
 - None of these
- 44. If more than one microorganism is used to obtain the required product, that type of fermentation is called**
- Batch
 - Continuous
 - Dual
 - Fed-batch
- 45. L. lysine is produced from**
- Coryne bacterium glutamicum
 - Corynebacterium sps.
 - Mycobacterium sps.
 - None of these

- 46. Methods used to get immobilized enzymes:**
- Adsorption
 - Encapsulation
 - Covalent bonding
 - All of these
- 47. Raw-material used for the production of alcohol is**
- Molasses
 - Starch
 - Sulphite waste water
 - All of these
- 48. Microorganisms used for alcohol production**
- Saccharomyces cereviceae
 - Bacillus subtilis
 - Penicillium chrysogenum
 - None of these
- 49. For streptomycin production the micro-organisms required are**
- Streptomyces griseus
 - Streptomyces niger
 - Saccharomyces cereviceae
 - All of these
- 50. The by-product during streptomycin production is**
- Vitamin A
 - Proline
 - Vitamin B₁₂
 - None of these
- 51. For acetic acid production the methods followed are**
- Orleans process
 - Rapid process
 - Submerged process
 - All of these
- 52. For amylase production the micro organism required is**
- B. subtilis
 - S. cereviceae
 - A. nigar
 - None of these
- 53. Pectinase is industrially produced from**
- S.cereviceae
 - Trichoderma Koningi
 - A. nigar
 - None of these
- 54. Cellulose are produced from**
- S.cereviceae
 - Trichoderma Koningi
 - A. nigar
 - None of these
- 55. Industrial Production of Vitamin-B12 is from**
- Propionibacterium sps.
 - Pseudomonas sps.
 - Both a and b
 - None of these
- 56. Clostridium acetobutylicum is used for the production of**
- Acetone - Butanol
 - Ethanol
 - Vitamin-B12
 - None of these
- 57. In the production of ethanol industrially the yeast used is**
- K.pneumoniae
 - Kluyveromyces fragilis
 - S. cerevisiae
 - Both b and c
- 58. Citric acid is used as**
- Flavouring agent in food
 - As an antioxidant
 - As preservative
 - All of the above
- 59. Citric acid is produced in aerobic conditions by the fungi**
- Aspergillus
 - Penicillin
 - Mucor
 - All of these
- 60. The raw material for citric acid production is**
- Corn
 - Molasses
 - Starch
 - None of these
- 61. Aspergillus niger is used generally for the production of**
- Ethanol
 - Penicillin
 - Citric acid
 - Lactic acid
- 62. In the citric acid production, the pH to be maintained in the fermenter is**
- 7.0
 - 5.0 to 6.0
 - 8.0 to 9.0
 - 1.0 to 6.0
- 63. The required temperature for the production of citric acid is**
- 10°C – 80°C
 - 30°C – 50°C
 - 20°C – 50°C
 - 25°C – 30°C

Short Answers. Internal I

1. What is industrial microbiology?
2. What are industrially important microbes?
3. What is primary screening?
4. What is downstream processing?
5. What is fermentation?

Short Answers. Internal II

1. What is bio-reactor?
2. What is fed batch fermentation?
3. What is submerged fermentation?
4. What are bio fuels?
5. What is crowded plate technique?