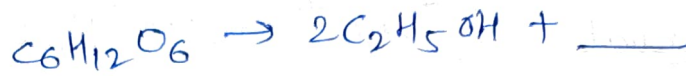


Q36. Which of the following is the anion exchanger
a) Dowex ~~HCR~~ HCR b) Amberlite LR c) DEAE d) None

Q37. Ion exchange chromatography based on principle
a) size & shape b) Net charge c) Polarity d) Biological affinity

Q38. Balance the reaction of fermentative production of ethanol.



a) $2O_2$ b) $2CO_2$ c) $2H_2O$ d) $2H_2$

Q39. For production of ethanol which microbe widely used

a) Bacillus subtilis b) Aspergillus oryzae
c) Saccharomyces cerevisiae d) E. coli

Q40. What is the molecular name of penicillin.

a) 6-amino 2 benzo penicillin
b) 6-amino-penicillanic acid.
c) 6-amino - 1 benzo amino acid
d) 6-amino - penicillanic benzo acid

Q41. In an experiment done by the Alexander Fleming in 1928 the penicillium notatum showed zone of inhibition against.

a) Bacillus subtilis b) S. aureus
c) E. coli d) B. megaterium

Q42. Auxotrophic mutant meaning a strain which grow on _____

a) ~~which~~ any general medium

b) specific substance required by wild type

c) required specific substance for growth which is not required by wild type organism

d) None of these

- Q43. Mutations that results due to treatment with certain agents are known as _____
 a) spontaneous b) Induced c) Natural d) None of these
- Q44. which of the following is not the characteristic of industrially important strains.
 a) Genetic stability b) toxic to humans c) Rapid Growth d) All of these
- Q45. Replica plating technique used for detecting of _____
 a) wild type strain b) mutant strain c) Simple strains d) All of these
- Q46. The recombination technique in which living cells are fused without cell walls. is called _____
 a) Replica plating b) conjugation c) Protoplast fusion d) None
- Q47. Microbial spores especially fungal spores are stored in _____
 a) oil b) soil c) slant d) suspension.
- Q48. Transfer of genetic material from one bacterium to another with the help of Bacteriophages the method is called _____
 a) conjugation b) Transduction c) Transformation d) None of these
- Q49. Citric acid naturally occurred in _____
 a) vegetables b) All fruits c) Grains d) Citrus fruits.
- Q50. Citric acid is the intermediate ~~between~~ of _____
 a) Glycolysis b) Krebs cycle c) ETC d) ED pathway
- Q51. Citric acid can be produced by using which of the following strains.
 a) B. subtilis b) S. cereviceae
 c) penicillin d) Aspergillus
- Q52. Citric acid was first time isolated & crystallized from _____
 a) Grape juice b) Banana juice c) Lemon juice
 d) Orange juice

- Q53. Substrate used for fungal amylase production is _____
 a) sugar cane molasses b) Corn starch c) Grape juice d) Lemon juice.
- Q54. Fungal amylase can be produced by: _____ method.
 a) Solid state fermentation b) Submerged fermentation
 c) Both a & b d) None of these
- Q55. In the production of wine which fruit is mostly used as substrate
 a) Lemon b) Orange c) Grapes d) Sugar cane
- Q56. Which of the following is the byproduct in wine making.
 a) H_2S b) H_2O c) O_2 d) CO_2
- Q57. Which of the following organism/s mostly used in the production of Biofertilizers.
 a) Bacillus b) ~~Streptococcus~~ Rhizobium c) Azotobacter
 d) b & c
- Q58. Most of the Biofertilizers contains microorganism which can able to fix _____ in atmosphere
 a) O_2 b) CO_2 c) N_2 d) H_2
- Q59. Empirical formula for glutamic acid is _____
 a) $C_5H_9O_4N$ b) $C_4H_8O_2N_2$ c) $C_2H_1O_1N_1$ d) All of these
- Q60. ^{Da} Glutamic acid production most frequently used microorganism is _____
 a) Corynebacterium b) Mycobacterium
 c) Acidophilus d) Brevibacterium