

Type:MCQ

Q1. was first discovered as a constituent of lemon. (1)

1. Lactic acid
2. ****Citric acid**
3. Sulfuric acid
4. Hydrochloric acid

Q2. is an intermediate of kreb cycle. (1)

1. **** Citric acid**
2. Starch
3. Cellulose
4. RUBISCO

Q3. Today about 99% of the world citric acid comes from..... (1)

1. osmosis
2. ****microbial fermentation**
3. fragmentation
4. condensation

Q4. In pharmaceutical industry Trisodium citrate is used as..... (1)

1. cosmetic
2. emulsifier
3. sweetener
4. ****blood preservative**

Q5. Iorn citrate is serves as a good source of (1)

1. ****Iorn**
2. copper
3. calcium
4. sulphur

Q6. The fungus is most commonly used for industrial production of

citric acid. (1)

1. ****Aspergillus niger**
2. *Escherichia coli*
3. *Gluconobactor suboxidance*
4. *Lactobacillus pentosus*

Q7.is the predominant carbon source for citric acid production. (1)

1. Lactose
2. Yeast
3. ****Glucose**
4. Saccharin

Q8. During the synthesis of citric acid there is a 10 fold increase in the activity of the enzyme..... (1)

1. ****citrate synthase**
2. citrate reductase
3. glucose isomerase
4. Deaminase

Q9.that converts the pyruvate to oxaloacetate,it is also a key enzyme in citric acid production. (1)

1. Lactate dehydrogenase
2. Glucose oxidase
3. ****Pyruvate carboxylase**
4. Glucose dehydrogenase

Q10. The yield of citric acid production substantially increases when the dissolved O₂ tention is (1)

1. **** higher**
2. medium
3. lower
4. zero

Q11. There are two processes by which citric acid can be industrially produced, theprocess and theprocess. (1)

1. ****surface, submerged**
2. **solid, liquid**
3. **mechanical, physical**
4. **physical, thawing**

Q12. Around 80% world's supply of citric acid is produced byprocess. (1)

1. **mechanical process**
2. ****submerged process**
3. **surface process**
4. **physical process**

Q13. In citric acid production by submerged process , the vessels of bioreactor are made up of high quality..... (1)

1. **aluminum**
2. **glass**
3. ****stainless steel**
4. **copper**

Q14. Actinorhodine is a member of antibiotic family called..... (1)

1. ****Isochromanequinone**
2. **Pyrroloquinoline quinone (PQQ)**
3. **Aminoglycosides**
4. **Penicillin**

Q15.makes up a class of polymers that are fully biodegradable. (1)

1. **Plastic**
2. **Glass**
3. **Thermacol**
4. ****Polyhydroxy alkanoates (PHA)**

Q16. is a medicinal and bacteriologic category of traditional Gram-negative antibacterial medications that inhibit protein synthesis and contain as a portion of the molecule an amino-modified glycoside. (1)

- 1. Amino acid**
- 2. Protein**
- 3. Nucleic acid**
- 4. **Aminoglycosides**

Q17. PHA is naturally produced from numerous genera of.....and amplified to bacterial..... (1)

- 1. **bacteria, fermentation**
- 2. virus, amplification**
- 3. eukaryotes, replication**
- 4. mammals, complementation**

Q18. The absence of solid support is a characteristic feature of Immobilization of enzymes by (2)

- 1. encapsulation**
- 2. **cross linking**
- 3. lattice entrapment**
- 4. covalent coupling**

Q19.involves the physical binding of the enzymes on the surface on an inert support. (2)

- 1. **Adsorption**
- 2. Cross linking**
- 3. Encapsulation**
- 4. Lattice entrapment**

Q20. Which forces involved in an adsorption of enzyme molecules? (2)

1. Covalent bonding
2. ****Hydrogen bonding and Van der Waals forces**
3. Centrifugal force
4. Covalent bonding and centrifugal force

Q21. In which Immobilization system, the enzyme molecules are attached to the carrier matrix by formation of covalent bonds? (2)

1. **** Covalent coupling**
2. Adsorption
3. Cross linking
4. Absorption

Q22. In covalent coupling, immobilization of the enzymes can be achieved by creation of covalent bonds between the chemical groups of.....and the chemical groups of support.(2)

1. vitamins
2. silica
3. **** enzymes**
4. cholesterol

Q23. Inthe enzyme molecules are entrapped within the suitable gels or fibres and there may or may not be covalent bond formation between enzyme molecules and matrix. (2)

1. ****Lattice entrapment**
2. Cross linking
3. Adsorption
4. Absorption

Q24. is method of enzyme immobilization. (2)

1. Transmission
2. Transcription

3. ****Encapsulation**
4. **Fermentation**

Q25. andare the three types of carrageenan. (1)

1. ****kappa , Lota , Lambda Carrageenan**
2. **alpha, beta, lambda carrageenan**
3. **kappa, Lota, lambda dextran**
4. **alpha , beta, theta Carrageenan**