

**TELANGANA UNIVERSITY**  
**S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029)**  
**II SEMESTER INTERNAL ASSESSMENT II EXAMINATIONS**  
**BIOTECHNOLOGY QUESTION BANK**

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- 1. According to Pasteur statements which one of the following is true**
  - a. Living organisms discriminate between stereoisomers
  - b. Fermentation is a aerobic process
  - c. Living organisms doesn't discriminate between stereoisomers
  - d. Both a and b
- 2. "I found floating therein earthly particles, some green streaks, spirally wound serpent-wise, and orderly arranged, the whole circumstance of each of these streaks was about the thickness of a hair on one's head".... These words are of**
  - a. Leeuwenhoek
  - b. A. Jenner
  - c. Pasteur
  - d. Koch
- 3. The principle light- trapping pigment molecule in plants, Algae, and cyanobacteria is**
  - a. Chlorophyll a
  - b. Chlorophyll b
  - c. Porphyrin
  - d. Rhodapsin
- 4. During Bio Geo chemical cycle some amount of elemental carbon was utilized by the microorganisms. The phenomenon is called as**
  - a. Dissimilation
  - b. Immobilization
  - c. Decomposition
  - d. Neutralization
- 5. Who demonstrated that open tubes of broth remained free of bacteria when air was free of dust.**
  - a. Abbe Spallanzani
  - b. John Tyndall
  - c. Francisco Redi
  - d. Pasteur
- 6. Reverse isolation would be appropriate for**
  - a. a patient with tuberculosis
  - b. a patient who has had minor surgery
  - c. a patient with glaucoma
  - d. a patient with leukemia
- 7. The symptom " general feeling of illness and discomfort " is called**
  - a. Cystitis
  - b. Malaise
  - c. Anaphylactic shock
  - d. Arthritis
- 8. On soybean which of the following forms symbiotism**
  - a. Azotobactor paspali
  - b. Rhizobium
  - c. Nostoc
  - d. Bradyrhizobium
- 9. Who provide the evidence that bacteriophage nucleic acid but not protein enters the host cell during infection**
  - a. Alfred D.Hershey & Leonard Tatum in 1951.
  - b. Alfred D.Hershey & Zindar Lederberg in 1951.
  - c. Alfred D.Hershey & Martha Chase in 1952.
  - d. Alfred D.Hershey & Macleod in 1952.

**1. When a bacterial cell and mitochondria are treated with cyanide and carbon monoxide what happens initially?**

- a. Respiration inhibits
- b. Photosynthesis inhibits
- c. Protein synthesis inhibits
- d. No effect occurs

**2. Which virus was first observed?**

- a. Hepatitis Virus
- b. TMV
- c. Cauliflower mosaic virus
- d. None of these

**3. The most important energy-yielding reaction for an aerobic organism is**

- a. Glycolysis
- b. EMP
- c. Krebs cycle
- d. Both b and c

**4. A disease that can be transmitted by an infectious agent from one individual to another is called**

- a. Epidemic
- b. Pandemic
- c. Communicable
- d. Contagious

**5. Cell cycle regulated by**

- a. Cyclins
- b. Cdks
- c. Cyclins and Cdks
- d. None of these

**6. The proteinaceous compound are converted to ammonia by**

- a. Putrefaction bacteria

- b. Ammonification bacteria
- c. Nitrification bacteria
- d. Denitrifying bacteria

**7. A cell becomes flaccid when placed in a**

- a. Isotonic solution
- b. Hypertonic solution
- c. Hypotonic solution
- d. Normal solution

**8. A mutation causing a substitution of one amino acid is called**

- a. Point mutation
- b. Silent mutation
- c. Missense mutation
- d. None of these

**9. The formation spindle fibres in the process of cell division is prevented by**

- a. Colchicine
- b. ATP
- c. Hydrazine
- d. All of these

**10. Important class of respiratory enzymes:**

- a. NAD
- b. Cytochromes
- c. ATPase
- d. Hydrolases

**11. The primary mode of transmission of poliomyelitis virus:**

- a. Flies
- b. Milk
- c. Person to person
- d. Food and water

**12. Genetic constitution of the cell is**

- a. Phenotype
- b. Genotype
- c. Cryptotype
- d. Histotype

**1. Cold like symptoms are caused by which bacteria**

- a. Pseudomonas
- b. E.coli
- c. Haemophilus influenza
- d. Haemophilus streptococcus

**2. In Streptococcus fecalis, the conjugation takes place at**

- a. Pili
- b. Cell membrane
- c. Cell wall
- d. Flagella

**3. The infected mad dogs may contain**

- a. Nergi bodies
- b. Niagri bodies
- c. Negri bodies
- d. Neisser bodies

**4. What disease the Nesser will produce?**

- a. Mumps
- b. Rubella
- c. Polio
- d. Measles

**5. Rancidity in spoiled foods is due to**

- a. Lipolytic organisms
- b. Proteolytic organisms
- c. Toxigenic microbes
- d. Saccharolytic microbes

**6. The Bateriaum that is most commonly used in genetic engineering is**

- a. Escherichia
- b. Klebsiella
- c. Proteius
- d. Serratia

**7. The functions of plasmid are**

- a. DNA replication
- b. Protein synthesis
- c. Cell wall synthesis
- d. None of the above

**8. Mycoplasmas are bacterial cells that**

- a. Fail to reproduce on artificial meida
- b. Have a rigid cell wall
- c. Are resistant to penicillin
- d. Stain well with Gram's stain

**9. The etiologic agent of botulism is a**

- a. Neurotoxin
- b. Endotoxin
- c. Enterotoxin
- d. All of the above

**10. The bacterial cells are at their metabolic peak during**

- a. Lag phase
- b. Log
- c. Stationary
- d. Decline

**11. Protein particles which can infect are called**

- a. Virons
- b. Prions
- c. Nucleoida
- d. None of these

**12. In most of purple bacteria, the light harvesting centers are**

- a. B 850 & Fe-S
- b. B 850 & B 875
- c. B 845 & B 875
- d. B 850 & B830

**1. The medium used in membrane filter technique was**

- a. EMB agar
- b. EMR-Vp medium
- c. Lactose broth
- d. Endo agar

**2. Lysol is a**

- a. Sterilent
- b. Disinfectant
- c. Antiseptic
- d. Antifungal agent

**3. Which of the following is a neutral stain?**

- a. Picric acid
- b. Giemsa
- c. Neutral red
- d. Malachite green

**4. Peptone water medium is an example for**

- a. Synthetic medium
- b. Semisynthetic medium
- c. Differential medium
- d. None of these

**5. The method in which the cells are frozen dehydrated is called**

- a. Pasteurization
- b. Dessication
- c. Disinfection
- d. Lyophilization

**6. The technique used to avoid all microorganisms is accomplished by**

- a. Sterilization
- b. Disinfection
- c. Surgical sterilization
- d. Disinfection Sterilization

**7. Thermal death time is**

- a. Time required to kill all cells at a given temperature
- b. Temperature that kills all cells in a given time
- c. Time and temperature needed to kill all cells
- d. All of the above

**8. A culture medium the exact composition of which is not known was called as**

- a. Simple
- b. Complex
- c. Defined
- d. Natural

**9. Elek's gel diffusion test is used for the detection of**

- a. Tetani toxin
- b. Cholera toxin
- c. Diphtheria toxin
- d. Toxoid

**10. Temperature required for pasteurization is**

- a. Above 150°C
- b. Below 100°C
- c. 110°C
- d. None of these

**11. Separation of a single bacterial colony is called**

- a. Isolation
- b. Separation
- c. Pure culturing
- d. All of these

**12. Which of the following is ionizing radiation?**

- a. U.V. rays
- b. IR
- c.  $\gamma$ -rays
- d. None of these

Short answers

1. What are normal flora?
2. What is sterilization ?
3. What is cryopreservation?
4. What is microbial growth?
5. What is incubation?