

Animal Immunity and Biotechnology

Biology · Answer Key · 30 Questions

1. Which of the following is a physical barrier in the nose and throat that prevents pathogen entry?

- A) White blood cells
- B) Hydrochloric acid
- C) Mucus**
- D) Cilia

2. What structures line the nasal passages and trachea to help prevent pathogens from entering the lungs?

- A) Tears
- B) Cilia**
- C) Conjunctiva
- D) Skin

3. Which bodily fluid in the eye helps protect against pathogens?

- A) Mucus
- B) Stomach acid
- C) Tears**
- D) Saliva

4. What substance in the stomach plays a role in preventing infections?

- A) Bile
- B) Saliva
- C) Hydrochloric acid**
- D) Enzymes

5. Which of these is a physical barrier that prevents pathogens from entering the body?

- A) White blood cells
- B) Unbroken Skin**
- C) Antibiotics
- D) Vaccinations

6. What type of cells are central to an animal's immune response against infecting microorganisms?

- A) Red blood cells
- B) White blood cells**
- C) Platelets
- D) Nerve cells

7. What is the definition of vaccinations?

- A) A type of antibiotic
- B) A process of exposing the body to weakened or dead pathogens to stimulate immunity**
- C) A substance that kills microorganisms
- D) A traditional method of food preservation

8. What is a primary importance of vaccinations?

- A) To increase the risk of infection
- B) To prevent serious illness by stimulating immunity**
- C) To cause fever
- D) To provide energy

9. Antibiotics are drugs that have what effect on micro-organisms?

- A) They stimulate their growth
- B) They kill or inhibit their growth**
- C) They make them more resistant
- D) They convert them into beneficial organisms

10. Which of these is an example of using microorganisms to produce medicines?

- A) Beer production
- B) Wine production
- C) Insulin production**
- D) Cheese production

11. Which of these is an example of using microorganisms to produce medicines?

- A) Bread mould
- B) Antibiotics**
- C) Wine
- D) Cheese

12. Which traditional technology involves the fermentation of grains or fruits?

- A) Cheese making
- B) Bread making
- C) Beer and wine production**
- D) Antibiotic production

13. What is a traditional product made using microorganisms like yeast and bacteria?

- A) Insulin
- B) Antibiotics
- C) Cheese**
- D) Beer

14. What is a traditional product made using microorganisms like yeast and bacteria?

A) Wine

- B) Insulin
- C) Antibiotics
- D) Bread mould

15. What is a traditional product made using microorganisms like yeast and bacteria?

A) Cheese

- B) Insulin
- C) Antibiotics
- D) Bread mould

16. What is a traditional product made using microorganisms like yeast and bacteria?

A) Bread

- B) Insulin
- C) Antibiotics
- D) Bread mould

17. What laboratory technique involves growing microbial cultures on a solid nutrient medium?

- A) Vaccination
- B) Antibiotic testing
- C) Growing cultures on agar plates**
- D) Stomach acid analysis

18. What is bread mould an example of in the context of investigations?

- A) A medicine
- B) A pathogen
- C) A microorganism**
- D) A vaccination

19. What is the primary role of mucus in the nasal passages?

- A) To digest food
- B) To warm the air
- C) To trap pathogens**
- D) To produce sound

20. The conjunctiva of the eye is part of the body's defense against what?

- A) Dehydration
- B) Pathogens**
- C) Excessive light
- D) Low temperatures

21. What is the function of hydrochloric acid in the stomach regarding immunity?

- A) To break down food
- B) To produce antibodies
- C) To kill ingested pathogens**
- D) To absorb nutrients

22. Unbroken skin acts as a barrier against:

- A) Internal bleeding
- B) Pathogens**
- C) Dehydration
- D) Sunlight

23. White blood cells are a key component of which system?

- A) Digestive system
- B) Nervous system
- C) Immune system**
- D) Circulatory system

24. What is the main purpose of a vaccination?

- A) To treat an existing infection
- B) To boost energy levels**
- C) To prevent future infections
- D) To relieve pain

25. Which type of drug is effective against bacterial infections?

- A) Antivirals
- B) Antifungals
- C) Antibiotics**
- D) Painkillers

26. Which of these is a direct product of using microorganisms?

- A) Skin
- B) Tears
- C) Beer**
- D) Hydrochloric acid

27. Which of these is a direct product of using microorganisms?

- A) Wine**
- B) Skin
- C) Tears
- D) Mucus

28. Which of these is a direct product of using microorganisms?

- A) Cheese**
- B) Skin
- C) Tears
- D) Hydrochloric acid

29. Which of these is a direct product of using microorganisms?

- A) Insulin**
- B) Skin
- C) Tears
- D) Mucus

30. Growing cultures on agar plates is a method used for what purpose?

- A) Producing vaccines
- B) Investigating microorganisms**
- C) Manufacturing antibiotics
- D) Digesting food