

**Questions for DEMO Examination (Horizontal Mobility (HM) Department of Biochemistry, Environmental Biotechnology, Biotechnology, Microbiology and Pharmaceutical Microbiology)**

**1. Which one of the following is not correctly matched?**

- A. Tuberculosis: Lungs
- B. Filaria: Lymph nodes
- C. Encephalitis: Heart**
- D. Leukaemia: Blood cells

**2. Can COVID-19 be cured?**

- A. Yes – Hot drinks can cure COVID-19
- B. No – COVID-19 is a death sentence
- C. No-but most people get better by themselves**
- D. No-it is life threatening

**3. Which of the following facts are incorrect?**

- A. Global warming is the rise in the average temperature of the earth's climate system
- B. Eutrophication is observed in water bodies
- C. The greenhouse effect is a natural phenomenon
- D. Ozone is harmless to breathe**

**4. Which one of the following is not correctly matched?**

- A. Haemoglobin: Skin**
- B. Vitamin C: Scurvy
- C. Carbohydrate: Potato
- D. Fat: Butter

**5. Measuring BOD (biological oxygen demand) is primarily used for**

- A. Estimating the types of microbes
- B. Determine the level of dissolved oxygen
- C. Estimating the quantity of organic matter in sewage water**
- D. None of the above

**6. Eggshells of birds become unusually thin when exposed to the pesticides in their environment. The protein that gets affected is \_\_\_\_\_**

- A. Calmodulin**
- B. Cysteine
- C. Serine
- D. None of the above

**7. Carbon dioxide is primarily called a greenhouse gas because**

- A. Traps heat**
- B. Traps light
- C. Traps warm currents
- D. None of the above

**8. What is the wavelength of visible spectrum?**

- A. 8500 - 9800 angstrom
- B. 7800 - 8000 angstrom
- C. 3900 - 7600 angstrom**
- D. 1300 - 3000 angstrom

**9. At present, scientists can determine the arrangement or relative positions of genes of DNA sequences on a chromosome. How does this knowledge benefit us?**

- 1. It is possible to know the pedigree of livestock.
- 2. It is possible to understand the causes of all human diseases.
- 3. It is possible to develop disease-resistant animal breeds.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 1, 2 and 3**
- C. 1 and 3 only
- D. 2 only

**10. \_\_\_\_\_ is an organism used to gauge the quality of an ecosystem.**

- A. Decomposers
- B. Predator
- C. Bio-remediator
- D. Bioindicator**

**11. The basic architecture of computer was developed by**

- A. John Von Neumann**
- B. Charles Babbage
- C. Blaise Pascal
- D. Garden Moore

**12. Identify false statement**

- A. You can find deleted files in recycle bin
- B. You can restore any files in recycle bin if you ever need
- C. You can increase free space of disk by sending files in recycle bin**
- D. You can right click and choose Empty Recycle Bin to clean it at once.

**13. From where coronavirus got its name?**

- A. Due to their crown-like projections**
- B. Due to their leaf-like projections
- C. Due to their surface structure of bricks
- D. None of the above

**14. The fundamental particles present in the nucleus of an atom are :**

A. Electrons and protons

**B. Protons and neutrons**

C. Neutrons and electrons

D. Neutrons and positrons

**15. The ratio of pure gold in 18-carat gold is**

A. 60%

**B. 75%**

C. 80%

D. 90%

**16. Can you always tell if someone has COVID-19?**

**A. No-not everyone with COVID-19 has symptoms**

B. Yes – it will be obvious; a person with COVID-19 coughs a lot

C. Yes – you can tell just by where a person comes from, their race and ethnicity

D. All

**17. The number of chromosomes present in a normal human being is?**

A.23

**B. 46**

C. 22

D. 48

**18. In order to tell Excel that we are entering a formula in cell, we must begin with an operator such as**

A. +

B. @

C. {

**D.=**

**19. Hepatitis is a general term for a disease that is caused by**

**A. Viruses**

B. Bacteria

C. Parasites

D. All the above

**20. Rain drops fall from great height. Which among the following statements is true regarding it?**

A. their velocity increases and they fall with the same velocity of the earth

B. they fall with the same ultimate velocity

C. their velocity increases and they fall with different velocities on the surface of the earth

**D. they fall with that ultimate velocity which is different for different droplets.**

**21. Which of the following is/are true about the human heart?**

- I. The heart has valves to ensure blood does not flow backwards when the atria or ventricles contract.
  - II. Oxygen-rich blood from the lungs enters the heart via the right atrium.
  - III. Ventricles have thicker muscular walls than the atria.
- A. Only I
  - B. Only II
  - C. **Only I and III**
  - D. Only I and II

**22. How many millimeters make ten kilometers?**

- A.  $10^{10}$
- B.  $10^9$
- C.  $10^8$
- D.  **$10^7$**

**23. The term LASER stands for**

- A. **Light Amplification by Stimulated Emission of Radiation**
- B. Light Amplification by Spontaneous Emission of Radiation
- C. Light Amplification by Stimulated Emission of Rays
- D. Light Amplification by Stimulated by Energy of radiation

**24. Which one of the following metals pollutes the air of a city having a large number of automobiles?**

- A. Cadmium
- B. Chromium
- C. **Lead**
- D. Copper

**25. Biodiversity forms the basis for human existence in the following ways:**

- 1. Soil formation
  - 2. Prevention of soil erosion
  - 3. Recycling of waste
  - 4. Pollination of crops
- A. 1, 2 and 3 only
  - B. 2, 3 and 4 only
  - C. 1 and 4 only
  - D. **1, 2, 3 and 4**

**26. Which is a communicable disease?**

- A. Asthma
- B. Scurvy
- C. **Measles**
- D. Diabetes

**27. What is Coronavirus?**

- A. It is a large family of viruses.
- B. It belongs to the family of Nidovirus
- C. **Both A and B are correct**
- D. Only A is correct.

**28. When should fabric face masks be worn?**

- A. On public transport
- B. In confined or crowded spaces
- C. In small shops
- D. All of the above**

**29. \_\_\_\_\_ is a waste disposal method where solid organic wastes are converted to the residue and gaseous products through combustion.**

- A. Incarnation
- B. Incineration**
- C. Incarceration
- D. Incubation

**30. Which of the following people is COVID-19 more dangerous for? (select all correct responses)**

- A. Children
- B. Older people-especially those aged 70 and above
- C. People with certain underlying health conditions**
- D. European people