

## NEET Predicted Question Paper 2024 for Biology (3)

1. Which of the following is not a desirable feature of a cloning vector?

- 1) Presence of origin of replication
- 2) Presence of a marker gene
- 3) Presence of single restriction enzyme site
- 4) Presence of two or more recognition sites

2. Select the incorrect statement with respect to acquired immunity.

- 1) Primary response is produced when our body encounters a pathogen for the first time.
- 2) Anamnestic response is elicited on subsequent encounters with the same pathogen.
- 3) Anamnestic response is due to memory of first encounter
- 4) Acquired immunity is non-specific type of defense present at the time of birth.

3. Given below are two statements:

**Statement I:** In a scrubber the exhaust from the thermal plant is passed through the electric wires to charge the dust particles.

**Statement II:** Particulate matter (PM 2.5) cannot be removed by scrubber but can be removed by an electrostatic precipitator.

In the light of the above statements, choose the most appropriate answer from the options given below:

- 1) Both statements I and Statements II are correct
- 2) Both statement I and Statement II are incorrect
- 3) Statement I is correct but Statement II is incorrect
- 4) Statement I is incorrect but Statement II is correct

4. Statements related to human Insulin are given below. Which statement(s) is/are correct about genetically engineered Insulin?

- a) Pro-hormone insulin contain extra stretch of C-peptide
- b) A-peptide and B-peptide chains insulin were produced separately in *E.coli*, extracted and combined by creating disulphide bond between them.
- c) Insulin used for treating Diabetes was extracted from Cattles and Pigs.
- d) Pro-hormone Insulin needs to be processed for converting into a mature and functional hormone.
- e) Some patients develop allergic reactions to the foreign insulin.

**Choose the most appropriate answer from the options given below:**

- 1) (a), (b) and (d) only
- 2) (b) only
- 3) (c) and (d) only
- 4) (c), (d) and (e) only

**5. Lippe's loop is a type of contraceptive used as:**

- 1) Cervical barrier
- 2) Vault barrier
- 3) Non-Medicated IUD
- 4) Copper releasing IUD

**6. In gene therapy of Adenosine Deaminase (ADA) deficiency, the patient requires periodic infusion of genetically engineered lymphocytes because:**

- 1) Retroviral vector is introduced into these lymphocytes
- 2) Gene isolated from marrow cells producing ADA is introduced into cells at embryonic stages
- 3) Lymphocytes from patient's blood are grown in culture, outside the body.
- 4) Genetically engineered lymphocytes are not immortal cells.

**7. Given below are two statements:**

**Statement I: The coagulum is formed network of threads called thrombins.**

**Statement II: Spleen is the graveyard of erythrocytes. In the light of the above statements, choose the most appropriate answer from the options given below:**

- 1) Both Statements I and Statement II are correct
- 2) Both Statement I and Statement II are incorrect
- 3) Statement I is correct but Statement II is incorrect
- 4) Statement I is incorrect but Statement II is correct

**8. Regarding Meiosis, which of the statements is incorrect?**

- 1) There are two stages in Meiosis, Meiosis –I and II
- 2) DNA replication occurs in S phase of Meiosis-II
- 3) Pairing of homologous chromosomes and recombination occurs in Meiosis-I
- 4) Four haploid cells are formed at the end of Meiosis-II

**9. In an E.coli strain i gene gets mutated and its product cannot bind the inducer molecule. If growth medium is provided with lactose, what will be the outcome**

- 1) Only z gene will get transcribed
- 2) z, y, a genes will be transcribed
- 3) z, y, a genes will not be translated
- 4) RNA polymerase will bind the promoter region

**10. Nitrogenous waste is excreted in the form of pellet or paste by:**

- 1) Ornithorhynchus
- 2) Salamandra
- 3) Hippocampus
- 4) Pavo

