

CUET Memory Based Biology Question Paper 2023 with Solutions

Q1. Match the following:

List I

List II

- | | |
|------------------------|----------------------------------|
| (A) Alexander Flemming | (i) Propionibacterium sharmanii. |
| (B) Citric acid | (ii) Penicillin |
| (C) Cyclosporin A, | (iii) Aspergillus niger |
| (D) Swiss cheese | (iv) Trichoderma polysporum. |

(a) (A) = (ii), (B) = (iii), (C) = (iv), (D) = (i)

(b) (A) = (i), (B) = (iv), (C) = (iii), (D) = (ii)

(c) (A) = (iii), (B) = (ii), (C) = (iv), (D) = (i)

(d) (A) = (i), (B) = (ii), (C) = (iii), (D) = (iv)

Ans.(a)

Q2. Which of the following is a biological control that is being developed for use in the treatment of plant diseases?

- (a) Baculoviruses
- (b) Trichoderma
- (c) Bacillus thuringiensis
- (d) All of the above

Ans.(b)

Q3. Which of the following is also called as 'brewer's yeast'?

- (a) Clostridium butylicum
- (b) Saccharomyces cerevisiae
- (c) Acetobacter aceti
- (d) Aspergillus niger

Ans.(b)

Q4. Match the following:

List I

List II

- (A) Streptokinase (i) blood-cholesterol lowering agents
(B) Statins (ii) used in detergent formulations
(C) Lipases (iii) Used in clarification of bottles fruit juices
(D) Pectinases (iv) used as a 'clot buster' for removing clots from the blood vessels of patients who have undergone myocardial infarction
- (a) (A) = iii, (B) = ii, (C) = iv, (D) = i
(b) (A) = ii, (B) = iii, (C) = i, (D) = iv
(c) (A) = iv, (B) = i, (C) = ii, (D) = iii...
(d) (A) = iii, (B) = ii, (C) = i, (D) = iv

Ans.(c)

Q5. The family pedigree of Queen Victoria are known to have descendants of a particular disease. The disease was.

- (a) Colour-blindness
(b) Haemophilia
(c) Sickle cell anaemia
(d) Thalassemia

Ans.(b)

Q6. Identify the correct complementary base pairing among the following?

- (a) Adenine + Guanine, Cytosine + Thymine
(b) Thymine + Guanine, Adenine + Cytosine
(c) Adenine + Thymine, Cytosine + Guanine
(d) Adenine + Adenine, Cytosine + Thymine

Ans.(c)

Q7. What will happen if we add Azotobacter to a wheat crop?

- (a) Soil will become rich in nitrogen content

- (b) Soil will lose its water holding capacity
- (c) The roots of the plants will die
- (d) The roots of the plant will grow rapidly

Ans.(a)

Q8. Which of the following RNA provides the template during bacterial translation?

- (a) t-RNA
- (b) m-RNA
- (c) r-RNA
- (d) hn-RNA

Ans.(b)

Q9. Match the following

- | List I | List II |
|------------------------|-------------------------------------|
| (A) RNA polymerase I | (i) methyl guanosine triphosphate D |
| (B) Tailing | (ii) Small nuclear RNA C |
| (C) RNA polymerase III | (iii) Adenylate residues B |
| (D) Capping | (iv) rRNAs A |

- (a) (A) = iv, (B) = iii, (C) = ii, (D) = i
- (b) (A) = ii, (B) = iv, (C) = i, (D) = iii
- (c) (A) = iii, (B) = i, (C) = iv, (D) = iii
- (d) (A) = i, (B) = ii (C) = iii, (D) = iv

Ans.(a)

Q10. Where does the process of microsporogenesis takes place?

- (a) Ovule
- (b) Placenta
- (c) Anther
- (d) Locule

Ans.(c)

Q11. What is the chromosome number in the meiocytes of maize?

- (a) 46
- (b) 12
- (c) 20
- (d) 34

Ans.(c)

Q12. Which of the following is correct about oral pills?

- (a) They contain estrogen
- (b) They contain relaxin
- (c) They contain progestogen and estrogen
- (d) They contain testosterone

Ans.(c)

Q13. In food chain, if there is 5000 joules of energy available to the producer then how much energy will be available to the secondary consumer?

- (a) 500 J
- (b) 50 J
- (c) 5 J
- (d) 0.5 J

Ans.(b)

Q14. The process of conversion of spermatids to spermatozoa is called.

- (a) Spermiation
- (b) Spermiogenesis
- (c) Spermatogenesis
- (d) Sporogeneses

Ans.(b)

Q15. The Leydig cells produce.

- (a) Seminal plasma
- (b) Progesterone
- (c) Androgens

(d) All of the above

Ans.(c)

Q16. The process of aeration is done at which of the following step of sewage treatment?

(a) Primary treatment

(b) Secondary treatment

(c) Biological treatment

(d) Both (b) and (c)

Ans.(d)

Q17. Secondary succession takes place at.

(a) Newly cooled lava

(b) Burned forests

(c) Bare rock

(d) All of the above

Ans.(b)

Q18. External fertilisation takes place in which of the following?

(a) Fishes

(b) Amphibians

(c) Majority of algae

(d) All of the above

Ans.(d)

Q19. Which of the following step is irrelevant with respect to gel electrophoresis?

(a) DNA moves under the influence of electric field

(b) Denaturation of DNA takes place

(c) DNA moves towards anode

(d) The matrix used is agarose

Ans.(b)

Q20. Which of the following activity may spoil our health?

(a) Eating junk food

(b) Maintenance of food and water hygiene

(c) Practising yoga

(d) Regular exercise

Ans; Ans.(a)

Q21. What was the reason for the extinction of the passenger pigeon and Steller's cow?

(a) Alien species invasion

(b) Over-exploitation by humans

(c) Co-extinctions

(d) Habitat loss

Ans. (b)