

STD:12 EM

FULL PORTION

BIO – BOTANY – ONE MARKS TEST

I CHOOSE THE CORRECT ANSWERS 25 x 1 = 25

- Find out the correctly matched pair
 - Rubber - Shorea robusta
 - Dye - Lawsonia inermis
 - Timber - Cyperus papyrus
 - Pulp - Hevea brasiliensis
- Arrange the correct sequence of ecological hierarchy starting from lower to higher level.
 - Individual organism --> Population Landscape --> Ecosystem
 - Landscape --> Ecosystem --> Biome --> Biosphere
 - Community --> Ecosystem --> Landscape --> Biome
 - Population --> organism --> Biome --> Landscape
- The A and B genes are 10 cM apart on a chromosome. If an AB/ab heterozygote is testcrossed to ab/ab, how many of each progeny class would you expect out of 100 total progeny?
 - 25 AB, 25 ab, 25 Ab, 25 aB
 - 10 AB, 10 ab
 - 45 AB, 45 ab
 - 45 AB, 45 ab, 5 Ab, 5aB
- The process of recombinant DNA technology has the following steps
 - Amplification of the gene.
 - Insertion of recombinant DNA into the host cells.
 - Cutting of DNA at specific location using restriction enzyme.
 - Isolation of genetic material (DNA) Pick out the correct sequence of step for recombinant DNA technology
 - II, III, IV, I
 - IV, II, III, I
 - I, II, III, IV
 - IV, III, I, II
- One of the chief reasons among the following for the depletion in number of species making endangered is
 - over hunting and poaching
 - green house effect
 - competition and predation
 - habitat destruction
- The genotype of a plant showing the dominant phenotype can be determined by
 - Back cross
 - Test cross
 - Dihybrid cross
 - Pedigree analysis
- Choose the correct statement(s) about tenuinucellate ovule.
 - Sporogenous cell is hypodermal
 - Ovules have fairly large nucellus
 - Sporogenous cell is epidermal
 - Ovules have single layer of nucellus tissue
- Arrange the layers of anther wall from locus to periphery
 - Epidermis, middle layers, tapetum, endothecium
 - Tapetum, middle layers, epidermis, endothecium
 - Endothecium, epidermis, middle layers, tapetum
 - Tapetum, middle layers endothecium epidermis
- Which one of the following crop varieties correct matches with its resistance to a disease?
 - Pusa Komal - Bacterial blight
 - Pusa Sadabahar - White rust
 - Pusa Shubhra - Chilli mosaic virus
 - Brassica -Pusa swarnim
- Which Mendelian idea is depicted by a cross in which the F1 generation resembles both the parents
 - Incomplete dominance
 - Law of dominance
 - Inheritance of one gene
 - Co-dominance
- Profundal zone is predominated by heterotrophs in a pond ecosystem, because of
 - with effective light penetration
 - no effective light penetration
 - complete absence of light
 - a and b
- Genetic engineering is
 - making artificial genes.
 - hybridization of DNA of one organism to that of the others.
 - production of alcohol by using micro organisms.
 - making artificial limbs, diagnostic instruments such as ECG, EEG etc.,
- Pond is a type of
 - forest ecosystem
 - grassland ecosystem
 - marine ecosystem
 - fresh water ecosystem
- A Plant called X possesses small flower with reduced perianth and versatile anther. The probable agent for pollination would be
 - water
 - air
 - butterflies
 - beetles
- Some of the characteristics of Bt cotton are
 - Long fibre and resistant to aphids.
 - Medium yield, long fibre and resistant to beetle pests.
 - High yield and production of toxic protein crystals which kill dipteran pests.
 - High yield and resistant to ball worms.
- Assertion : Sporopollenin preserves pollen in fossil deposits. Reason : Sporopollenin is resistant to physical and biological decomposition.
 - Assertion is true; reason is false
 - Assertion is false; reason is true
 - Both Assertion and reason are not true
 - Both Assertion and reason are true
- Test cross involves
 - Crossing between two genotypes with recessive trait
 - Crossing between two F1 hybrids
 - Crossing the F1 hybrid with a double recessive genotype
 - Crossing between two genotypes with dominant trait
- Transmitting tissue is found in
 - Micropylar region of ovule
 - Pollen tube wall
 - Stylar region of gynoecium
 - Integument
- In a test cross involving F1 dihybrid flies, more parental type offspring were produced than the recombination type offspring. This indicates
 - The two genes are located on two different chromosomes
 - Chromosomes failed to separate during meiosis
 - The two genes are linked and present on the some chromosome
 - Both of the characters are controlled by more than one gene
- Statement A: Coffee contains caffeine. Statement B: Drinking coffee enhances cancer.
 - A is correct, B is wrong
 - A and B – Both are correct
 - A is wrong, B is correct
 - A and B – Both are wrong
- Assertion (A) : Gamma rays are generally use to induce mutation in wheat varieties. Reason (R) : Because they carry lower energy to non-ionize electrons from atom.
 - A is correct. R is correct explanation of A.
 - A is correct. R is not correct explanation of A.
 - A is correct. R is wrong explanation of A.
 - A and R is wrong.
- Column I represent the size of the soil particles and Column II represents type of soil components. Which of the following is correct match for the Column I and Column II.

Column I	Column II
I) 0.2 to 2.00 mm	i) Slit soil
II) Less than 0.002 mm	ii) Clayey soil
III) 0.002 to 0.02 mm	iii) Sandy soil
IV) 0.002 to 0.2 mm	iv) Loamy soil
a) I-ii, II-iii, III-iv, IV-i	b) I-iv, II-i, III-iii, IV-ii
c) I-iii, II-ii, III-i, IV-iv	d) None of the above
- Which one of the following palindromic base sequence in DNA can be easily cut at about the middle by some particular restriction enzymes?
 - 5 CGTTCG 3 3 ATCGTA 5
 - 5 GATATG 3 3 CTAATA 5
 - 5 GAATTC 3 3 CTTAAG 5
 - 5 CACGTA 3 3 CTCAGT 5
- Dwarfing gene of wheat is
 - Pal 1
 - Atomita 1
 - Norin 10
 - Pelita 2
- Match column I (crop) with column II (Corresponding disease resistant variety) and select the correct option from the given codes.

Column I	Column II
I) Cowpea	i) Himgiri
II) Wheat	ii) Pusa komal
III) Chilli	iii) Pusa Sadabahar
IV) Brassica	iv) Pusa Swarnim
a) I-iv, II-iii, III-ii, IV-i	b) I-ii, II-i, III-iii, IV-iv
c) I-ii, II-iv, III-i, IV-iii	d) I-i, II-ii, III-iii, IV-iv

Answer Key

- 1 b
- 2 c
- 3 c
- 4 d
- 5 d
- 6 b
- 7 a
- 8 d
- 9 a
- 10 d
- 11 b
- 12 b
- 13 d
- 14 b
- 15 d
- 16 d
- 17 c
- 18 c
- 19 c
- 20 a
- 21 c
- 22 c
- 23 c
- 24 c
- 25 b

