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UPDATED BIO BOTANY BOOK BACK ONE MARKS ANSWER
A.ANBU M.SC.,B.ED., BIOLOGY DEPARTMENT Ph : 8508429396

Chapter 1

A SEXUAL AND SEXUAL REPRODUCTION IN PLANTS

- 1.d) yeast reproduce by budding
- 2.b) P.Maheswari
- 3.c) Rhizome-musa
- 4.b) G.B Amici
- 5.a) 10 micrometer
- 6.a) Microspore
- 7.b) 1-iii 2-iv, 3-i, 4-ii.
- 8.d) Tapetum,middle layers endothecium epidermis
- 9.c) Nucellus-nutritive tissue for developing embryo
- 10.d) Both assertion and reason are true
- 11.a) sporogenous cell is hypodermal
- 12.b) embryo sac
- 13.c) 6
- 14.c) Styler region of gynoecium
- 15.d) Hilum
- 16.b) Air
- 17.b) 2.and 4 are correct
- 18.a) Paddy
- 19.d) Seed
- 20.b) 2 celled stage

chapter 2

CLASSICAL GENETICS

- 1.a) Mitochondria and chloroplasts
- 2.d) aabb
- 3.d) Two
- 4.d) Skin colour in humans
- 5.d)Round seeds with yellow cotyledons wrinkled seeds with yellow cotyledons
- 6.c) Crossing the F1 hybrid with a recessive genotype
- 7.d) 50:50
- 8.b) Test cross
- 9.a) Tightly linked genes on the chromosomes show very combinations
- 10.d) Co-dominance
- 11.b) Dominant epistasis
- 12.c) Pod length
- 13.b) Interaction between two alleles of different loci
- 14.c) The two genes are linked and present on the same chromosome

- 15.d) Four
- 16.c) Law of independent assortment
- 17.c) Law of segregation
- 18.a) Epistatic
- 19.a) Dominance
- 20.b) 12:3:1
- 21.a) 1856-1863
- 22.b) Trichomal glandular or non glandular

Chapter 3

CHROMOSOMAL BASIS OF INHERITANCE

- 1.c) Two copies of three genomes
- 2.d) 45AB,45 ab,5Ab,5aB
- 3.c) A-2,B-3,C-1,D-4
- 4.c)3 and 4
- 5.b) Possibility of double cross over
- 6.b) 7:1:1:7
- 7.b) SHGL
- 8.b) A to G, C to T, C to G and T to A
- 9.a) 34 and 37
- 10.a) Missense mutation
- 11.c) A is correct.R is wrong explanation of A
- 12.c) 9cM

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Chapter 4

PRINCIPLES AND PROCESS OF BIOTECHNOLOGY

- 1.d) Both b and c
- 2.d) Confer resistance to antibiotics
- 3.c) GAATTC
- 4.b) Hybridization of DNA of one organism to that of others
- 5.d) I ,II and III
- 6.d) IV, III, I, II.
- 7.c) 5' GAATTC 3'
- 8.c) Plasmid Boliver and Rodriguez
- 9.b) Bioreactor
- 10.d) c d a b
- 11.d) Agrose Gel Electroporosis
- 12.d) reason and assertion false
- 13.a) Ti plasmid causes the bunchy top disease
- 14.d) Polymerase chain reaction
- 15.b) Transformed cells
- 16.d) High yield and resistant to ball worms

Chapter 5

PLANT TISSUE CULTURE

- 1.b) Capacity to generate a whole plant from any plant cell / explant
- 2.b) Vegetative multiplication of plants by using small explants
- 3.a) C A D B
- 4.b) 15 to 30 minutes and 121°C
- 5.b) Callus undergoes differentiation and produce somatic embryoids
- 6.d) Anti- carcinogenic property is not seen in catharanthus roseus
- 7.b) Meristem culture
- 8.c) Biosafety
- 9.c) At very low temperature of -196 by using liquid nitrogen
- 10.d) Agar

Chapter 6

PRINCIPLES OF ECOLOGY

- 1.c) Community -> Ecosystem -> Landscape -> Biome
- 2.d) i and iii only
- 3.b) Niche
- 4.d) i and ii only
- 5.a) Calotropis
- 6.c) i,ii and iv only
- 7.b) Statement A is correct and B is incorrect
- 8.c) Capillary water
- 9.a) Holard Echard Chresard
- 10.c) iii ii i iv
- 11.d) Halophytes
- 12.a) (+) Parasitism (-) Amensalism
- 13.c) Mimicry
- 14.b) Anabaena
- 15.d) Soil
- 16.b) Absorbing in organic ions from soil
- 17.c) Nerium
- 18.a) Nymphaea and Typha
- 19.d) iv iii ii v i
- 20.a) Argemone
- 21.b) Zoochory

Chapter 7

ECOSYSTEM

- 1..a) Bacteria
- 2.b) Rice field
- 3.d) Freshwater Ecosystem
- 4.d) Self sufficient and self regulating
- 5.b) No effective light penetration
- 6.b) 2 - 10%
- 7.d) Forest Ecosystem
- 8.d) All the above

- 9.c) Tertiary consumer -> Secondary consumer-> Primary consumer -> Producer
- 10.d) b and c
- 11.c) Pyramid of number in a forest Ecosystem
- 12.c) Anabolism
- 13.a) Nitrogen cycle
- 14.c) i and ii

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8.ENVIRONMENTAL ISSUES

- 1..c) Redesigning landfill dump to allow methane to be collected
- 2. a) Statement A is correct and statement b is wrong
- 3.d) Sacred grooves - Saintri hills of Rajasthan
- 4.d) Ozone
- 5.b) CFC's and N2O
- 6.d) Habitat destruction
- 7.d) Removal of plants and trees
- 8.a) Quick nutrient cycling
- 9.c) Dobson
- 10.c) Appiko movement
- 11.a) Sesbania and acacia

Chapter 9

PLANT BREEDING

- 1.b) Assertion wrong and reason is right
- 2.a) Centres of origin
- 3.c) Clonal selection
- 4.b) i- III, ii - I, iii - IV, iv - II .
- 5.d) Mutation breeding ???????
- 6.b) Hybridization
- 7.a) clone
- 8.d) Introduction
- 9.c) Norin 10
- 10.c) Intra varietal
- 11.a) pureline
- 12.b) Rice
- 13.b) Saccharum barberi and Saccharum officinarum
- 14.b) ii i iii iv
- 15.c) proteins
- 16.a) pusa komal bacterial blight.
- 17.d) pusa komal - Brasica
- 18.b) id, iic, iiiia, ivb.

Chapter 10

ECONOMICALLY USEFUL PLANTS AND ENTERPENEURIAL BOTANY

- 1.b) Both i and ii are correct
- 2.a) Assertion is correct , Reason is wrong

- 3.d) Brazil
- 4.a) A is correct, B is wrong
- 5.a) Lamiaceae
- 6.a) Tropical African region
- 7.d) G.barbadense
- 8.c) Both are correct
- 9.b) Dye - Lawsonia inermis
- 10.c) Both statements are correct
- 11.c) Both statements are correct
- 12 c) Marijuana
- 13.c) Steveocide
- 14.d) Zea Mays

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