

2 MARKS**Definitions and scientific terms**

1. Special Creation - (94)
2. Theory of spontaneous generation as Abiogenesis - (94)
3. Big bang theory - (94)
4. Coacervates - (94)
5. Theory of chemical evolution - (94)
6. Oparin Haldane Theory - from organic component - (94)
7. Eras - (94)
8. Epochs - (94)
9. Periods - (94)
10. Golden age of Reptiles - (95)
11. Age of Human Beings - (95)
12. Pleistocene - (95)
13. Age of Mammal - (95)
14. Age of Fishes
15. Archaeopteryx - (96)
16. Relative dating - (96)
17. Absolute dating - (96)
18. Protobionts - (96)
19. Paleontology - (97)
20. Fossils - (97)
21. Coprolites - (98)
22. Neo Darwinians - (101)
23. Atavistic Organ - (99)
24. Connecting link - (99)
25. Biogenetic law or theory of recapitulation - (100)
26. Ontogeny recapitulates phylogeny - (100)
27. Molecular Clock - (100)
28. Use & disuse theory - (100)
29. Lamarck's theory of inheritance of acquired characters - (100)
30. August Weismann and his postulation - (100)
31. Bottle Neck Effect - (105)

32. ALXI - (103)
33. Founder's principle - (105)
34. Biston betularia - (102)
35. Rama Pithecus
36. Siva Pithecus
37. Homohabilis
38. Homo erectus -
39. Homo Sapiens
40. Australopithecus
41. Dryopithecus

} (107)

3 MARKS

1. Actual Remains
2. Petrification
3. Mould & Cast
4. Divergent evolution
5. Homologous Structure - (88)
6. Convergent evolution - (88)
7. Analogous Structure - (88)
8. Prodigality of Production - (101)
9. Objection of Darwinism - (101)
10. Salient Features of Mutation Theory by Hugo de Vries - (102)
11. Stabilising selection - centripetal selection - (104)
12. Directional Selection - (104)
13. Disruptive selection or centrifugal selection - (104)
14. Altruism and kin selection - (104)
15. Gene flow - (104)
16. Genetic drift or Sewall Wright - (105)

} (97)

5 MARKS

1. Urey Miller - or experimental approach to life - 96, 97.
2. Darwin's Theory of Natural Selection - (101)
3. Modern Synthetic theory - (102)
4. Evolution by anthropogenic sources - (102)
5. Industrial Melanism -
6. Darwin's finches for adaptive radiation - (103)
7. Modern Natural Selection - (104, 105)

8. Hardy weingberg principle - (106)
9. Assumption of Hardy Weinberg - (106)

CHAPTER - 7

2 MARKS

1. Non infectious diseases - eg?
2. Communicable diseases - (111)
3. Widal test - (112)
4. Black death, bubonic plague - (113)
5. Typhoid - (113)
6. Vibrio cholerae - (113)
7. Tetanus - Lock Jaw
8. Amoebiasis - (115)
9. Dermotropic disease - (115)
10. Viscerotropic - (115)
11. Entamoeba histolytica - (115)
12. Neurotropic disease - (113)
13. Pneumotropic disease - (113)
14. Helminthiasis - (118)
15. Ascariasis - (118)
16. Filariasis - (Pg.No. 119)
17. Microfilariae - (119)
18. Lysozyme - (120)
19. Inter feron - (120)
20. Chemotactic Signal - (120)
21. Inflammatory barrier - 9120)
22. Phagocytic barrier - (120)
23. Non-specific or Natural immunity -
24. CMI - as cell mediated immunity - (121)
25. Antibody mediated immunity - (121)
26. Haemato poiesis
27. Primary or central lymphoid organ - (123)
28. Secondary or peripheral lymphoid organ - (123)
29. Bursa of Fabricius - (123)
30. Immunocompetent cell - (123)
31. Peyer's Patch - (124)
32. MALT, GALT, BALT - (124)
33. Tonsils - (124)
34. Pluripotent - (126)
35. Second generation vaccine -
36. Functions of immunoglobulin - (128)
37. Haptens - (127)
38. Cytokine - (126)
39. Antigen - (127)
40. immunogen - (127)
41. adjuvants - (127)
42. Paratope - (127)
43. Epitope - (127)
44. Exogenous antigen - (127)
45. Endogenous antigen - (127)
46. Functions of immunoglobulin - (128)
47. Bonds binding antigen and Antibody - (128)
48. Preciptin reaction - (128)
49. agglutination - (128)
50. Opsonisation - (128)
51. Opsonin - 9128)
52. antitoxins - (129)
53. Vaccines - (129)
54. Give comment on without actually experiencing the disease” - (129)
55. Live attenuated vaccine - (121)
56. DPT - expand - (130)
57. Toxoid vaccine - (130)
58. Edward Jenner - (130)
59. BCG - Expand - (130)
60. Killed Vaccine - (130)
61. allergy and allergens - (130)
62. Mast cell - (137)
63. IGE - (130)
64. Anaphylaxis - (131)
65. Lentivirus - (131)
66. Analgesics
67. Endorphins - (137)

68. Hallucination
69. Korsak off syndrome - (136)
70. Euphoria - (135)
71. Paranoia - (135)
72. Liver Cirrhosis - (136)
73. Trophozoite - (115)
74. African sleeping sickness - (115)
75. Tsetse fly - (115)
76. Sand fly - (116)
77. Signet Ring stage - 116
78. Shizont - 116
79. Schuffner's granule - (116)
80. Haemozoin - (116)
81. Ookinete - (116)
82. Merozoites - (116)
83. Sporozoites - (116)
84. Paraxysms - (117)
85. Dermatomycosis - (118)
86. Western Blot - (132)
87. Auto antibodies - (132)
88. ELISA - (132)

3 MARKS

1. Prophylactic measures or preventive measures of Malaria - (118)
2. Classification of viral diseases.
3. Three species of sleeping sickness - (116)
4. Kalaazar - (116)
5. Athlete's foot - (118)
6. Physiological barriers -
7. Chemical mediators -
8. Anatomical barriers -
9. Auto immune disease - (132)
10. Non-organ specific Auto immune disease - (132)
11. One organ specific auto immune disease - (132)
12. Contact inhibition - (133)
13. Seek and destroy - (133)

14. Immnotherapy - (133)
15. With drawal symptoms - (135)
16. Symptoms of mental depression - (137)
17. Ig structure - draw and label.
18. Lymph Node draw and label

5 MARKS

1. Secondary or peripheral lymphoid organ (lymph Node) - (124)
2. Sexual reproductive life cycle of plas modium or life cycle of plasmodium in primary host (Mosquito) - (117)
3. Innate immunity - (120)
4. Life cycle of plasmodium - (116)
5. Pre erythrocytic life cycle of plasmodium - (inside liver cell) - (116)
6. Asexual or secondary host - (man) - (116)
7. Erythrocytic life cycle of plasmodium inside (Erythrocyte) (RBC) - (116)
8. Differentiate Normal and cancer cell Types of Antibody and Antigen interactions?
9. Classification of drugs and prevention and control of drug abuse - (136)
10. Primary lymphoid organ (Thymus) - (124)
11. Acquired immunity or specific immunity and its components - (121)
12. Innate immunity or non specific immunity - (120)
13. Active and passive immunity - differentiate
14. Primary and secondary immune response differentiate.
15. Structure of HIV - (131)
16. Cell mediated immunity (T-Lymphocytes)
17. Humoral or antibody mediated immunity (B-Lymphocytes)

CHAPTER - 8

1. Probiotics
2. Prebiotics
3. Cottage Cheese - (143)
(or) Paneer -
4. Baker's yeast (Sacharomyces cerevisiae) - (143)

5. SCP - Single cell protein - (143)
6. LAB - (142)
7. Fermentors - (143)
8. Antibiotic - (143)
9. Selman Waksman's discovery - (143)
10. Chain, Fleming, Florey - Role - (144)
11. Swiss cheese - (143)
12. Role of Lactobacillus bulgaricus - (143)
13. Eggs of Antibiotics - (144)
14. Yogurt?
15. Propioni bacterium shermanii - Role - (143)
16. Queen of drugs?
17. Pencillium chrysogenum - (144)
18. Broad spectrum bacteriostatic antibiotic?
19. Tetracycline- (144)
20. Streptomycin Role - (144)
21. Chlortetracycline Role - (144)
22. Antibiotic resistance - (144)
23. Super bug - (144)
24. Zymology - (145)
25. Oenology - (145)
26. Beer - barley - (145)
27. Rum - Sugarcane - (145)
28. Whisky - (145)
29. Pathaneer - (145)
30. Toddy - (145)
31. Industrial alcohol - (145)
32. Rennet - (146)
33. Clot buster - (146)
34. Cyclosporin-A - (146)
35. Streptococcus Role - (146)
36. Statins - (146)
37. MFC - (148)
38. Methanogens - (148)
39. Gobar - (149)
40. Biopesticide - (149)
41. Crytoxin - (149)

42. Bt-cotton - (149)
43. Bacillus thuringiensis
44. Trichoderma Role
45. Mycoherbicide - (149)
46. Delta-endotoxin - (149)
47. Rhizobium - (150)
48. Bio fertilizer - (150)
49. Mycorrhiza - (150)
50. Bio remediation - (150)
51. BGA (150)
52. Pseudomonas putida - (151)
53. GEM - (151)
54. Ideonella sakiensis - (151)

3 Marks:

1. Key features of organic farming - (150)
2. MFC - (148)
3. Differentiate somatic and germline gene therapy
4. hGH
5. Human insulin
6. Human blood clotting factor-VIII
7. Types of ELISA - (163)

5 Marks:

1. Microbes in household products - (143)
2. Antibiotics - (143)
3. Fermented beverages - (145)
4. Industrial alcohol - (145)
5. Microbes in bioactive molecules - (146)
6. Waste water treatment - (146)
7. Gobar gas - (148)
8. Microbes as bio fertilizers - (149)
9. Microbes as bio control agents - (149)
10. Microbes as bio pesticides - (149)
11. Microbes in bioremediation - (150)

Chapter-9

2 Marks:

1. Humulin – (156)
2. Rosie – (157)
3. hGH
4. Interferons – (158)
5. Vaccines – (158)
6. Recombinant vaccine – (158)
7. Sub unit vaccine – (158)
8. Attenuated recombinant vaccine – (158)
9. DNA vaccine – (158)
10. Gene therapy – (159)
11. Gene augmentation - (159)
12. Totipotency – (161)
13. Stem cell bank – (162)
14. Pluripotency – (161)
15. Anti sense gene – (161)
16. Multipotency – (161)
17. ELISA
18. Unipotency – (161)
19. Stem cell bank – (162)
20. PCR – (163)
21. Transgenic animals – (164)
22. GMO's – (164)
23. Cloning – (166)

3 Marks:

1. Differentiate Somatic gene therapy from germline gene therapy.
2. hGH
3. Types of ELISA - (163)
4. Human insulin
5. Human blood clotting factor VIII

5 Marks:

1. Recombinant Human Insulin – (156)
2. Inteferons
3. Recombinant vaccines

4. ADA or SCID or immune deficiency disease caused by genetic disorder or bubble body syndrome – (160)
5. PCR – (163)
6. PCR – in clinical diagnosis and its application – (164)
7. ELISA – (162)
8. Production of Transgenic animals and their use
9. Biological products and uses – (166)
10. Animal cloning – (166)
11. Advantages or Merits and disadvantages or demerits of cloning animals and Ethical issues of cloning – (167)

Chapter-10

2 Marks:

1. Habitat – (172)
2. Niche – (172)
3. Guilds – (172)
4. Ecological equivalents
5. Bergmann's rule – (173)
6. Allen's rule – (173)
7. Jordon's rule – (173)
8. Stenotherms – (174)
9. Eurytherms – (173)
10. Phototaxis – (174)
11. Photokinesis – (174)
12. Pedogenesis – (175)
13. Pedosphere – (175)
14. Porosity – (176)
15. Permeability – (176)
16. Hygrometer – (176)
17. Humidity – (176)
18. Coriolis effect – (176)
19. Anemometer – (176)
20. Acclimatization – (176)
21. Conformers – (183)
22. Aestivation – (183)
23. Hibernation – (183)
24. Diapause – (183)

25. Crypsis – (183)
26. Nataliy – (185)
27. Crude density – (185)
28. Bio potential – (187)
29. Amensalism – (188)
30. Mutualism – (187)
31. Commensalism – (188)
32. Ethology – (183)

5 Marks:

1. Differentiate 'r' and 'k's selected species – (187)
2. J-shaped curve and S-shaped curve form (186)
3. Adaptations of terrestrial animals – (184)
4. Adaptations of aquatic animals – (184)
5. Responses to Abiotic factors – (183)
6. Tundra biome – (179)
7. Taiga – (179)
8. Properties of soil – (175)
9. Properties of water – (175)

Chapter-11

2 Marks:

1. Gateway for India's flora and fauna
2. Lungs of the planet – (201)
3. Shifting or Jhum cultivation – (202)
4. Co extinction – (202)
5. Hotspot – (204)
6. Red DataBook – (205)
7. Red list category – (205)
8. National Park – (206)
9. Wild life sanctuaries – (207)
10. Biosphere Reserve
11. Sacred Groves
12. Offsite collection
13. Exsitu conservation
14. Gene Bank

5 Marks:

1. Causes of biodiversity loss – (200)
2. Bio geographical region – (198)
3. Levels of bio diversity – (194)

Chapter-12

2 Marks:

1. Smog – (216)
2. PAN – (216)
3. AQI – (217)
4. Bio magnification – (221)
5. Noise pollution – (220)
6. Eutrophication – (222)
7. Dioxins - (223)
8. Oligotrophic stage – (222)
9. Cultural or accelerated Eutrophication – (222)
10. GHG – (227)
11. Kyoto protocol – (227)
12. Ozone depletion – (227)
13. Chipko movement – (228)
14. Forest Man of India – (229)
15. Amrita Devi – (229)
16. Ecosan toilet – (229)
17. COD – (219)
18. Vitrification – (225)
19. Agro chemicals
20. Nammalvar – (223)
21. Geological repositories – (225)