Code Number: H-13 ENTRANCE EXAMINATION – 2015

M.Sc. Molecular Microbiology

Time: 2 hours

Maximum Marks: 100

HALL TICKET NO.

INSTRUCTIONS

Please read carefully before answering the questions:

- 1. Enter your <u>Hall Ticket Number both on the top of this page and on the</u> <u>OMR</u> answer sheet.
- 2. Answers are to be marked <u>only on the OMR answer sheet</u> following the instructions provided there upon.
- 3. Hand over the **OMR answer sheet** to the Invigilator before leaving the examination hall.
- The question paper contains 100 questions (Part-A: Question Nos. 1-25 and Part-B: Questions Nos. 26-100) of multiple-choice printed in <u>24</u> pages, including this page. <u>One OMR answer sheet</u> is provided separately. Please check.
- 5. The marks obtained in **<u>Part-A</u>** will be used for resolving the tie cases.
- 6. Each question carries <u>one</u> mark.
- 7. There is <u>negative marking</u> for wrong answers, in **Parts A and B**. For each wrong answer, <u>0.33 mark</u> will be deducted.
- 8. Calculators and mobile phones are **<u>NOT</u>** allowed.

$\underline{PART} - \underline{A}$

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- 1. The feature which is **not** a characteristic of the phylum Porifera is
 - A. Multicellular organisms with bodies full of pores and channels
 - B. Unspecialized cells that can transform into other types of cells
 - C. Lack circulatory and nervous systems
 - D. Adult forms are highly motile and lack sedentary habitat
- 2. One of the following statements which defines Hill's reaction is
 - A. Photolysis of water releasing oxygen and hydrogen by isolated chloroplasts in light
 - B. Photolysis of water by isolated chloroplasts in light resulting in the reduction of some chemical compounds and release of oxygen
 - C. Photolysis of water by chloroplasts
 - D. Photolysis of water by isolated chloroplasts resulting in the formation of NADPH and ATP
- 3. The red sea which gets its names due to red color imparted by abundant growth of one of the following organisms
 - A. Prochlorococcus sp.
 - B. Trichodesmium erythraeum
 - C. Nostoc punctiforme
 - D. Synechocystis sp. PCC6803
- 4. The adverse effects caused by medical intervention and modern medicines is called as
 - A. Medicogenesis
 - B. Latrogenesis
 - C. Helicogenesis
 - D. Acetogenesis

- 5. Stem cells are defined as
 - A. The first cells of mitosis in meristem region
 - B. Cells harvested from brain stem
 - C. The cells found in the fluid of spinal chord
 - D. Embryonic cells with no predetermined development pathway
- 6. Mowing of a grass lawn facilitates better maintenance primarily owing to
 - A. Wounding which stimulates rapid regeneration
 - B. Removal of apical dominance
 - C. Removal of apical dominance and promotion of intercalary meristems
 - D. Removal of apical dominance and promotion of lateral meristems
- 7. Match the following vitamins listed as L, M, N and O with their nature or deficiency symptoms associated with them given as A, B, C and D.
 - L. Vitamin D2 (a) Cholecalciferol
 - M. Vitamin D3 (b) Ergocalciferol
 - N. Vitamin A (c) Cobalamin
 - O. Vitamin B12 (d) Retinoic acid
 - A. L-b, M-a, N-d, O-c
 - B. L-a, M-b, N-d, O-c
 - C. L-b, M-a, N-c, O-d
 - D. L-d, M-a, N-c, O-b
- 8. The mRNA coding sequence for the synthesis of aminoacids in a part of a polypeptide chain is UCU-GAU-CAC-UAG-GAU-AAG-CAC. The base sequence of the DNA strand for the above given mRNA sequence is

A. AGA-CTA-GTG-ATC-CTT-TTC-GTG

B. AGA-CTA-GTG-ATC-CTT-TTC-GTC

- C. TGT-CTT-GTG-TTC-CTT-TTC-GTG
- D. AGA-CTA-GTG-ATC-CTA-TTC-GTG

9. A special sensory organ evolved in certain fish and sharks which helps in sensing electric fields in water is

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- A. Ampullae of Lorenzini
- B. Jacobson's organ
- C. Slit sensillae
- D. Islets of Langerhans

10. Which reaction is the oxidative reaction in glycolysis?

- A. Phosphate is added to glucose at the C-6 position by hexokinase
- B. Glucose-6-phosphate is converted to fructose-6-phosphate by phosphoglucoisomerase
- C. Glyceraldehyde-3-phosphate is converted to 1, 3 bisphosphoglycerate by triose phosphate dehydrogenase
- D. 1,3-bisphoshoglycerate is converted to 3-phosphoglycerate by phosphoglycerokinase

11. An IgG molecule upon cleavage by papain in the hinge area results in the production of:

- A. One constant fragment (Fc) and two antigen binding fragments (Fab)
- B. Two constant fragments (Fc) and one antigen binding fragment (Fab)
- C. Two constant fragments (Fc) and two antigen binding fragments (Fab)

D. One constant fragment (Fc) and one antigen binding fragment (Fab)

12. Match the following genera of pathogenic microorganisms listed as L, M, N and O which are generally associated with the disease symptoms given as A, B, C and D.

L. Pythium	(a) Powdery mildew
M. Erysiphe	(b) Downy mildew
N. Xanthomonas	(c) Damping off
O. Pernospora	(d) Canker

A. L-b, M-c, N-d, O-a

B. L-c, M-b, N-d, O-a

- C. L-d, M-c, N-b, O-a
- D. L-c, M-a, N-d, O-b

- 13. The disease caused by fluke worm and transmitted through water snails as host is
 - A. Schistosomiasis
 - B. Mollusciosis
 - C. Meningitis
 - D. Angiostrongyliasis
- 14. Match the following items listed as L, M, N and O with their associated characteristics given as A, B, C and D.
 - L. Resistance gene

(a) Glycoprotein(b) Interferon

- M. Antiviral factor
- N. Lectin
- O. Systemin

- (c) Leucine rich repeats(d) Peptide with hormonal activity
- A. L-c, M-b, N-a, O-d
- B. L-b, M-a, N-c, O-d
- C. L-c, M-d, N-b, O-a
- D. L-a, M-c, N-d, O-b
- 15. Match the type of cell listed as L, M, N and O to the tissue or part of the cell given as A, B, C and D.
 - L. Tracheid(a) PhloemM. Sieve element(b) Meristematic tissueN. Parenchyma(c) Cell wall of fruitO. Stone cell(d) Xylem
 - A. L-d, M-a, N-b, O-c
 - B. L-a, M-d, N-b, O-c
 - C. L-b, M-d, N-c, O-a
 - D. L-c, M-d, N-b, O-a

- 16. In Mendel's experiments, if the gene for tall (T) plants was incompletely dominant over the gene for short (t) plant, what would be the result of crossing two Tt plants?
 - A. All the offspring would be intermediate
 - B. ¹/₄ tall; ¹/₄ intermediate height; ¹/₂ short
 - C. ¹/₂ tall; ¹/₄ intermediate height; ¹/₄ short
 - D. ¹/₄ tall; ¹/₂ intermediate height; ¹/₄ short
- 17. The process by which Adenosine triphosphates (ATPs) are synthesized from Adenosine diphosphates (ADPs) using proton motive force that get pumped through intermembrane spaces of mitochondria is
 - A. Methyl acetylation
 - B. Dehydrogenation
 - C. Oxidative phosphorylation
 - D. Reductive carboxylation
- 18. Prenatal screening of developing fetus to detect gross chromosomal aberrations as well as sex prediction is carried by a process termed as
 - A. Amniocentesis
 - B. Aminiosynthesis
 - C. Amnopotency
 - D. Aminosynthesis
- 19. Match the following genera of plants listed as L, M, N and O with their corresponding families to which they are grouped under plant systematic classification assigned as A, B, C and D.

L. Ocimum	(a) Meliaceae
M. Sesamum	(b) Apocynaceae
N. Nerium	(c) Lamiaceae
O. Azadirachta	(d) Pedaliaceae

- A. L-c, M-a, N-b, O-d
- B. L-c, M-d, N-b, O-a
- C. L-d, M-b, N-a, O-c
- D. L-d, M-a, N-c, O-b

- 20. *Drosophila virilis* is a diploid organism with 2n=12 chromosomes. How many chromatids and chromosomes are present in metaphase II of meiosis?
 - A. 12 chromatids and 6 chromosomes
 - B. 12 chromatids and 12 chromosomes
 - C. 24 chromatids and 12 chromosomes
 - D. 24 chromatids and 24 chromosomes
- 21. Match the following human syndromes listed as L, M, N and O with the phenotypes associated with their ploidy status as A, B, C and D.
 - L. Cri du chat syndrome
 - M. Philadelphia chromosome
 - N. Turner syndrome
 - O. Down syndrome

(a) Chronic myelocytic leukemia

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- (b) Chromosome 5 deletion
- (c) Trisomy 21
- (d) Aneuploid females (XO)
- A. L-b, M-c, N-d, O-a
- B. L-a, M-d, N-b, O-c
- C. L-a, M-c, N-b, O-d
- D. L-b, M-a, N-d, O-c
- 22. The pH at which a bipolar ion acts as neutral ion and does not migrate either to cathode or anode is known as
 - A. Immobility point
 - B. Isoelectric point
 - C. Amphitropic point
 - D. Isoequilibrium point
- 23. The stage of cell division in which the genetic material gets duplicated along with its associated nuclear proteins
 - A. G₁ phase of Interphase
 - B. G₂ phase of Interphase
 - C. S phase of Interphase
 - D. Metaphase I

24. Bordeaux mixture, a fungicide is constituted of

- A. $MgSO_4 + Ca(OH)_2$
- B. Mg(OH)₂
- C. $CuSO_4 + NaOH$
- D. $CuSO_4 + Ca(OH)_2$
- 25. During prokaryotic protein synthesis the following complex enables to position the mRNA on the ribosome.
 - A. 5S rRNA of the 50S subunit complexes with the initiation codon on the mRNA
 - B. 16S rRNA of the 30S subunit complexes with a site on the mRNA called Shine
 Dalgarno sequence
 - C. 23S rRNA of the 50S subunit interacts with the initiation factor of protein synthesis
 - D. 16S rRNA complexes with Pribnow box

<u> PART – B</u>

26. Light and green islands is a classic sign of disease symptom caused by

- A. Fungal infection
- B. Bacterial infection
- C. Viral infection
- D. Insect infestation
- 27. The very recent viral disease pandemic felt across the globe for which fruit bats serve as natural host is
 - A. AIDS
 - B. Avian influenza
 - C. HIN1
 - D. Ebola

28. Molarity of pure water is

- A. 55.6
- B. 12.4
- C. 44.3
- D. 34.1

29. One of the following is **not** a member of *Enterobacteriaceae*

- A. Serratia
- B. Shigella
- C. Klebsiella
- D. Stigmatella

- 30. The specialized organ of a mollusc which acts as a balance sensor, sucker and aids in lubrication by secreting mucus is
 - A. Mantle
 - B. Foot
 - C. Radula
 - D. Periostracum

31. The phytochemicals existing prior to exposure to a pathogen are collectively termed as

- A. Phytoalexins
- B. Phytoplasmins
- C. Phytoanticipins
- D. Phytoallergins
- 32. The availability of this form of nucleotides enabled Federick Sanger to discover nucleic acid sequencing methods, which have been subsequently developed to automated sequencing
 - A. Deoxynucleotides
 - B. Dideoxynucleotides
 - C. Trideoxynuclotides
 - D. Ribonucleotides
- 33. Burning of waste substances usually at high temperatures to convert them to ashes is called
 - A. Eutrophication
 - B. Incineration
 - C. Desertification
 - D. Saponification

- 34. The blood clotting factors which cause coagulation of blood are mostly serine proteases and they exist in circulatory system as inactive enzyme precursors called as
 - A. Halogens
 - B. Zymogens
 - C. Glucogens
 - D. Haemogens
- 35. Ammonia oxidation to nitrate depends on the following two bacteria
 - A. Nitrosomonas-Nitrosospira
 - B. Azospirillum-Pseudomonas
 - C. Nitrobacter-Nitrococcus
 - D. Nitrosospira-Nitrococcus

36. Spiral shaped chloroplast are present in

- A. Spirogyra
- B. Oedogonium
- C. Ulothrix
- D. Ulva

37. An example of an enzyme hydrolase is

- A. Glutamate synthase
- B. Lactate dehydrogenase
- C. Glucose -6-phosphatase
- D. Nitrogenase
- 38. The process of moulting or shedding of exoskeleton by invertebrates is called as
 - A. Amoebiasis
 - B. Ecdysis
 - C. Excission
 - D. Chytridiasis

.39. The first organisms to appear on the earth were

- A. Autotrophic and anaerobic
- B. Autotrophic and aerobic
- C. Heterotrophic and anaerobic
- D. Heterotrophic but aerobic
- 40. The expected proportion of triply heterozygous offspring in the F_2 generation of a trihybrid cross when the genes involved exhibit independent assortment is

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- A. 1/8
- B. 1/64
- C. 9/64
- D. 27/64

41. One of the following amino acids <u>does</u> not contain a benzene ring

- A. Phenyl alanine
- B. Tyrosine
- C. Tryptophan
- D. Aspartic acid

42. Pick up the **<u>odd</u>** one among the following TCA cycle intermediates

- A. Malate
- B. Succinate
- C. Fumarate
- D. Citrate

43. The exoskeletons of most of the aquatic crustaceans are bio-mineralized with

- A. Càlcium chloride
- B. Calcium carbonate
- C. Magnesium carbonate
- D. Magnesium chloride

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- 44. The hydrolysis product of an ester leads to the formation of one molecule each of
 - A. Acid and alcohol
 - B. Aldehyde and ketone
 - C. Acid and aldehyde
 - D. Alcohol and methane
 - 45. A thermophilic bacterium has been the source for DNA polymerase used routinely in polymerase chain reaction
 - A. Thiobacillus ferroxidans
 - B. Thermus aquaticus
 - C. Sulfolobus italicum
 - D. Thermospira aquatica
 - 46. The type of relationship between two individuals where one benefits from the other without affecting it is referred as
 - A. Mutualism
 - B. Commensalism
 - C. Parasitism
 - D. Amensalism

47. One of the following is **not** a member of the family Verbenaceae

- A. Lantana
- B. Lippia
- C. Rotheca
- D. Abutilon

48. An oxidation-reduction reaction involves

- A. .Internal rearrangment of a molecule
- B. Cleavage of a large molecule into smaller molecule
- C. Transfer of electrons from one molecule to another
- D. Combining two small molecules to create one larger one

- 49. One among the following is **true** of aneuploidies in general
 - A. A monosomy is more frequent in humans than a trisomy
 - B. 45X is the only known human live-born monosomy
 - C. Of all human aneuploidies, only down syndrome is associated with mental retardation

- D. Some human aneuploidies have selective advantage in some environments
- 50. The basic difference between sugar molecules of RNA and DNA is
 - A. RNA has a six-carbon sugar, DNA has a five-carbon sugar
 - B. The sugar of RNA has a hydroxyl group that is not found in the sugar of DNA
 - C. RNA contains uracil; DNA contains thymine
 - D. DNA's sugar has a phosphorous atom, RNA's sugar lacks phosphorous atom
- 51. One among the following is **not** a fluorescent probe
 - A. Ethidium bromide
 - B. Dansyl chloride
 - C. Fluorescein
 - D. Malachite green
- 52. Bilaterally symmetrical invertebrates with segmented body carrying paired un-jointed parapodia embedded with chaetae for locomotion is
 - A. Arachnids
 - B. Echinoderms
 - C. Annelids
 - D. Molluscs
- 53. Guttation differs from transpiration in that the water lost is
 - A. Not pure and is in the vapour state
 - B. Not pure and is in the liquid state
 - C. Pure and is in the liquid state
 - D. Pure and is in the vapour state

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- 54. Biradial symmetry which is a combination of radial and bilateral arrangement of body parts is exhibited by
 - A. Ctenophores
 - B. Porifera
 - C. Cnidarians
 - D. Placozoans
- 55. Which of the following is an anomeric pair?
 - A. D-glucose and L-glucose
 - B. D-glucose and D-fructose
 - C. α -D-glucose and β -D-glucose
 - D. α -D-glucose and β -L-glucose
- 56. In which of the following interactions, at least one dominant allele from each of two genes is required for the expression of the phenotype?
 - A. Dominant epistasis
 - B. Recessive epistasis
 - C. Complementary genes
 - D. Duplicate genes
- 57. The role of light in plants is
 - A. It is necessary for photosynthesis
 - B. It controls growth movements
 - C. It controls the distribution of hormones
 - D. It controls all of the above
- 58. The primary consumer/s among the listed living beings
 - A. Snakes and frog
 - B. Eagle and snake
 - C. Water insects
 - D. Insects and cattle

59. The folded states of globular proteins in aqueous solutions are stabilized primarily by

- A. Hydrophobic interactions
- B. Peptide bonds
- C. Ionic bonds
- D. Disulfide bonds

60. If a nutrient medium is inoculated with 100 bacterial cells and the generation time of the bacteria is 30 min, what will be the number of cells in the medium after 3 hours?

- A. 18000
- B. 1400
- C. 3200
- D. 6400

61. Etiolation in plants is caused when they

- A. Are grown in blue light
- B. Are grown in intense light
- C. Have mineral deficiency
- D. Are grown in the dark
- 62. Generically chemical compounds are given IUPAC names. The acronym, IUPAC stands for
 - A. International Union of Pure and Applied Chemistry
 - B. International Unicode for Paramedical and Analytical Compounds
 - C. Indian Union for Public and Administrative Code
 - D. Indian Unicode for Public and Applied Chemistry

63. The generic name 'terrestrial flower' is given to

- A. Volvox
- B. Hydra
- C. Sea Anemone
- D. Sea Dollar

64. C_4 plants are more efficient than C_3 plants, because

- A. CO₂ acceptor is PEP
- B. They have two types of chloroplasts
- C. They have photorespiration
- D. They lack photorespiration

65. A continuous stretch of overlapping DNA sequences is called

- A. Contig
- B. Open reading frame
- C. Clone
- D. Catenation

66. A feature characteristic of a vertebrate and is lacking in an invertebrate is

- A. A chordate body with a spinal column derived from notochord
- B. Sexual reproductive system to produce gamets
- C. Assymetrical body of the individuals
- D. Lacking sensory receptors and organs

67. Nastic movements differ from tropic movements in being

- A. Directional with respect to stimulus
- B. Non-directional with respect to stimulus
- C. Controlled by chemicals
- D. Controlled by turgor pressure

68. Identify the mismatch among the following

- A. Bifidobacterium produces acetic acid
- B. Frankia fixes nitrogen
- C. Escherichia Methyl red positive
- D. Enterobacter $-H_2S$ positive

- 69. Homogenous population of antibodies that have narrow specificity towards an epitope are
 - A. Polyclonal antibodies
 - B. Monoclonal antibodies
 - C. Phage displayed antibodies
 - D. Immunogens
- 70. A pollen mother cell which is undergoing a reductional division is observed to be at Prophase-I stage. The sequence of the sub-stages in Prophase-I are
 - A. Pachytene, leptotene, zygotene, diplotene, diakinesis
 - B. Zygotene, pachytene, leptotene, diplotene, diakinesis
 - C. Diplotene, diakinesis, leptotene, zygotene, pachytene
 - D. Leptotene, zygotene, pachytene, diplotene, diakinesis
- 71. The 'age of fishes' is commonly referred to the period
 - A. Devonian
 - B. Triassic
 - C. Carboniferous
 - D. Ordovician
- 72. Tay-Sachs disease is the result of a genetic defect in the metabolism of
 - A. Triacylglycerols
 - B. Gangliosides
 - C. Sterols
 - D. Vitamin D
- 73. All of the following enzymes are involved in DNA replication except
 - A. Helicase
 - B. Primase
 - C. DNA polymerase
 - D. RNA polymerase

74. A procedure used to treat blood vessel and lymphatic malformations is

- A. Physiotherapy
- B. Vasculature therapy
- C. Immunotherapy
- D. Sclerotherapy
- 75. When the dark period of a short day plant is interrupted by a brief exposure to light, the plant shall
 - A. Flower immediately
 - B. Will not flower at all
 - C. Turns in to a long day plant
 - D. Produces more flowers

76. The monosaccharide which is **not** an aldose is

- A. Ribose
- B. Glucose
- C. Fructose
- D. Erythrose

77. During stationary phase of microbial growth

A. Balance between cell division and cell death occur

- B. Cell division is more than cell death
- C. Cell death is more than cell division
- D. None of the above

78. The structure of NAD+ does not include

- A. An adenine nucleotide
- B. 'Riboflavin
- C. A pyrophosphate bond
- D. Two ribose residues

79. Present day advanced Taxonomy of plants is

- A. Alpha Taxonomy
- B. Omega Taxonomy
- C. Chemo Taxonomy
- D. Cyto Taxonomy
- 80. The physical disorder of the kidney resulting from inflammatory cell proliferation in its glomerular structure leading to reduced glomerular blood flow and retention of waste products is called
 - A. Hematuria
 - B. Oliguria
 - C. Uremia
 - D. Proteinuria
- 81. Which of the following observations made by Avery, MacLeod and McCarty about S and R strains of *Streptococcus penumoniae* in mice is <u>correct</u>?
 - A. Heat-killed S cells caused pneumonia
 - B. Living R cells caused pneumonia
 - C. A mixture of heat-killed S cells and living R cells was able to cause pneumonia
 - D. Heat-killed R cells caused pneumonia
- 82. The most universal feature of programmed cell death in plant is activation of
 - A. Proteasome
 - B. Nucleosome
 - C. Ribozyme
 - D. Mesozome
- 83. Which antibiotic inhibits bacterial protein synthesis by interfering the binding of tRNA with the ribosome
 - A. Tetracycline
 - B. Penicillin
 - C. Rapamycin
 - D. Bacitracin

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84. Sterigmata formation is a characteristic feature of

- A. Basidiomycetes
- B. Ascomycetes
- C. Oomycetes
- D. Zygomycetes
- 85. The body fluid consisting of plasma, red blood cells, white blood cells and platelets which circulates in a vertebrate vascular system to carry oxygen and nutrients to and from the organs and tissues is
 - A. Lymph
 - B. Blood
 - C. Serum
 - D. Interstitial fluid
- 86. The nitrogen-fixing nodules of a bean plant carries a variant of hemoglobin molecule which scavenges oxygen is
 - A. Carbaminohemoglobin
 - B. Leghemoglobin
 - C. Myeloglobin
 - D. Oxyhemoglobin
- 87. The gene mapping which measures the physical distance between genes in terms of nucleotide base pair length is
 - A. Genetic map
 - B. Physical map
 - C. Linkage map
 - D. Deletion map
- 88. Which one among the following is **not** an amniote?
 - A. Reptile
 - B. Mammal
 - C. Fish
 - D. Bird

89. The unpleasant smell which fats and oils develop on long exposure to moist air is due to

- A. Chlorination
- B. Hydrogenation
- C. Rancidification
- D. Esterification
- 90. The resistance that occurs in plants before a pathogen-plant cell contact and prevents infection is

A. True resistance

- B. Pseudoresistance
- C. Axeny resistance
- D. Hyper reaction
- 91. The labyrinthodont which is recognized as a transitional fossil between fish and tetrapods featuring fish-like tail and amphibian-like skull and limbs is
 - A. Icthyostega
 - B. Ornithorhyncus
 - C. Archaeopteryx
 - D. Homunculus

92. Movement of colloidal particles under the influence of electrical field is called

- A. Electrophoresis
- B. Dialysis
- C. Ionization
- D. Electrodialysis
- 93. A bacterial topoisomerase that can change the topological or configurational shape of a DNA is
 - A. DNA gyrase
 - B. DNA polymerase
 - C. DNA exonuclease
 - D. DNA lygase

- 94. The science of deciphering fossil age by studying the "layer-cake" of sedimentary material of rocks and earth crust is called as
 - A. Lithography
 - B. Pedigraphy
 - C. Stratigraphy
 - D. Lichenography
- 95. The Cell lineage theory was proposed by the scientist
 - A. Rudolf Ludwig Carl Virchow
 - B. Thomas Hunt Morgan
 - C. Ernst Haeckal
 - D. Otto Eugen Schulz
- 96. Pyrimidine dimers which are considered as molecular lesions are formed from thymine or cytosine bases in DNA by
 - A. Oxido-reduction reactions
 - B. Physical resonance
 - C. Mechanical reactions
 - D. Photochemical reactions
- 97. Acetylene is categorized under one of the following classes
 - A. Alkane series
 - B. Saturated hydrocarbons
 - C. Alkyne series
 - D. Olefin series
 - 98. One of the following is a characteristic feature of insect-pollinated plant
 - A. Pollen produced in large quantities
 - B. Small & inconspicuous flowers
 - C. Stamens & stigmas with winged appendages
 - D. Stamens & pollen are sticky

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- 99. The birds known for their vocalization of human beings, birds and other sounds heard outdoors belong to the family
 - A. Corvidae
 - B. Mimidae
 - C. Bucerotidae
 - D. Passeridae
- 100. The variation observed among the individual genotypes in the length of the DNA sequence when digested with endonuclease enzymes is referred as

- A. Restriction fragment length polymorphism (RFLP)
- B. Random amplified polymorphic DNA (RAPD)
- C. Single nucleotide polymorphic DNA (SNP)
- D. Simple sequence repeats (SSR)