

031/2016

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. Malaria is caused by :
(A) Entamoeba histolytica (B) Leishmania
(C) Clostridium (D) Plasmodium
2. Respiratory pigment found in human :
(A) Haemocyanin (B) Haemoerythrin
(C) Haemoglobin (D) None of these
3. Which theory holds that the cells in the reproductive organs carry a complete set of genetic information that is passed to the egg and sperm?
(A) Pangenesis (B) Preformationism
(C) Germ plasm Theory (D) Cell Theory
4. Father of Modern Genetics :
(A) Aristotle (B) Gregor Mendel
(C) Robert hook (D) Schleiden
5. The acrosome of sperm is derived from :
(A) Golgi complex (B) Lysosome
(C) Nucleosome (D) Mitochondria
6. Who developed PCR?
(A) Walter Gilbert (B) Frederick Sanger
(C) Sewall Wright (D) Kary Mullis
7. Telomerase is a :
(A) DNA polymerase (B) RNA polymerase
(C) RNA dependent DNA polymerase (D) DNA dependent RNA polymerase
8. The vehicle of genetic information within a cell :
(A) Gene (B) Chromosomes
(C) Nucleotide (D) Nitrogen bases

9. Who proposed cell theory?
 (A) Schleiden and Schwann (B) Klilkins and Franklin
 (C) James Watson and Francis Crick (D) Walter Gilbert and Frederick Sanger
10. In enkaryotics, DNA is closely associated with a special class of proteins, which helps to form tightly packed chromosomes?
 (A) Chromtin (B) Histones
 (C) Cy toskeleton (D) Nucleus
11. The unit of recombination :
 (A) Cm (B) Rad
 (C) Dalton (D) Centi Morgan
12. _____ are the natural ends, the tips, of a linear chromosome , they serve to stabilize the chromosome ends.
 (A) Kinetochore (B) Telomeres
 (C) Chromatids (D) Sister chromatids
13. Sepia belongs to which class :
 (A) Isopoda (B) Gastropoda
 (C) Scyphopoda (D) Cephalopoda
14. Petasma is seen in :
 (A) Crab (B) Prawn
 (C) Lobster (D) Mussel
15. Which is the correct order of stages in the cell cycle?
 (A) S, G1, anaphase, prophase metaphase
 (B) S, G1, prophase, metaphase, anaphase
 (C) Prophase, S, G1, metaphase, anaphase
 (D) G1, S, prophase metaphase, anaphase
16. The grasping organ of molluscs :
 (A) Flame cells (B) Radula
 (C) Cnidoblast (D) Petagium

17. The production of gametes in a male animal :
- (A) Spermatogenesis (B) Spermatogonia
(C) Spermatids (D) Spermatocytes
18. Which of the following is an important sanctuary in Kerala?
- (A) Vedanthangal (B) Bharathpur
(C) Manas (D) Peppara
19. The locomotory organ of earthworm :
- (A) Parapodium (B) Chloride cell
(C) Setae (D) Appendages
20. The connecting link between aves and reptiles :
- (A) Peripatus (B) Archeopteryx
(C) Dinosaur (D) Crocodile
21. Rearing of silk worm is called :
- (A) Apiculture (B) Pearl culture
(C) Pisciculture (D) Sericulture
22. When the sister chromatids separate and move toward opposite spindle poles in cell cycles?
- (A) Prometaphase (B) Metaphase
(C) Anaphase (D) Telophase
23. When the heterozygote has a phenotype intermediate between the phenotypes of the two homozygotes, the trait is said to?
- (A) Incomplete dominance (B) Test cross
(C) Epistasis (D) Monohybrid cross
24. The device used for the detection of toxic chemical at ultralevels in industrial products and chemical substances for biomedical diagnosis :
- (A) Electrofusion (B) Bioaugmentation
(C) Biosensor (D) Bioreactor

25. The collective changes in membrane potential, beginning with depolarization to threshold and ending with return potential, that occur with stimulation of an excitable cell and act as a basis for neural communication is called :
- (A) Action spectrum (B) Activation energy
(C) Action potential (D) Actin
26. Alternate form of the same gene is known as :
- (A) Alleles (B) Aerobes
(C) Allosteric modulation (D) Amide bond
27. The formation of new blood vessels termed as :
- (A) Angiostorm (B) Anion
(C) Angiogenesis (D) Aneuploidy
28. Elephantiasis is caused by :
- (A) *Wuchereria bancrofti* (B) *Ascaris lumbricoid*
(C) Liver fluke (D) *Entamoeba histolica*
29. Phosphofructokinase is a key enzyme in :
- (A) Krebs cycle (B) Glycolysis
(C) Ornithine cycle (D) HMP shunt
30. Which of the following phylum shows alternation in generation?
- (A) Arthropoda (B) Echinodermata
(C) Cnidaria (D) Protozoa
31. Proteins that bind to other polypeptides, preventing their aggregation and promoting their folding and or assembly in to multimeric proteins is :
- (A) Chaperonins (B) Chromatid
(C) Chromatin (D) Chaperones
32. The non protein component of an enzyme, it can be either inorganic or organic is :
- (A) Coenzyme (B) Coated vesicles
(C) Codons (D) Cofactor

33. The infectious protein particle which cause Kuru disease and mad cow disease :
- (A) Virion (B) Bacteriophage
(C) Prion (D) Plasmid
34. Oxidative phosphorylation takes place in :
- (A) Cytosol (B) Nucleus
(C) Entoplasmic reticulum (D) Mitochondria
35. The enzymes responsible for constructing new DNA strands during replication or DNA repair is called :
- (A) DNA polymerases (B) DNA ligase
(C) DNA gyrase (D) Dehydrogenase
36. Red wines and red grapes are important source of which anti tumor agent :
- (A) Taxol (B) Vincristine
(C) Resveratol (D) Bradystanin
37. Osteomalacia is caused by the deficiency of :
- (A) Vitamin B (B) Vitamin A
(C) Vitamin C (D) Vitamin D
38. The process of synthesis of RNA from DNA is called :
- (A) Transcription (B) Translation
(C) Reverse transcription (D) Transcriptome
39. The process by which a patient is treated by altering the genotype of diseased cells is :
- (A) Gene duplication (B) Genome
(C) Gene therapy (D) Genetic polymorphisms
40. The hormone responsible for the ejection of milk from mammary gland :
- (A) Vasopressin (B) Oxytosin
(C) Renin (D) Progestrone
41. Who proposed species concept?
- (A) Mayer (B) Mason
(C) Aristotle (D) Simpson

42. Indian breed of horse :
(A) Deccani (B) Lohi
(C) Nali (D) Bhutia
43. Biological name of King vulture :
(A) *Sarcogyps calvus* (B) *Haliastur Indus*
(C) *Oriolus oriolus* (D) *Columba lapra*
44. Kazhiranga National park is in :
(A) Orissa (B) Gujarath
(C) Rajasthan (D) Assam
45. The smallest bone of human stapes located in which organ :
(A) Eye (B) Ear
(C) Brain (D) Nose
46. Larvae of *Balanoglossus* :
(A) Tornaria (B) Zoea
(C) Planula (D) Nauplius
47. Father of Green revolution :
(A) Varghese Kuriyan (B) Heslop-Harrison
(C) M.S Swaminathan (D) Black welder
48. The hormone secreted by kidney :
(A) Erythropoeitin (B) ADU
(C) Adrenaline (D) Oxytocin
49. Father of modern taxonomy :
(A) Simpson (B) Mason
(C) Carolus Linnaeus (D) Black welder
50. The gland which serves as both endocrine and exocrine :
(A) Thyroid (B) Pituitory
(C) Parathyroid (D) Pancreas

51. Protein synthesis takes place in :
- (A) Nucleus (B) Ribosome
(C) Cytosol (D) Entoplasmic reticulum
52. _____ is a global voluntary non governmental organisation formed in 1970 for the conservation of environment.
- (A) Green peace (B) IUCN
(C) WWF (D) IBWL
53. Which gas is responsible for Bhopal tragedy?
- (A) Chloro fluoro carbon (B) Methyl isocyanate
(C) Methane (D) Sulphur dioxide
54. The smallest egg :
- (A) Reptilian (B) Mammalian
(C) Avian (D) Fish
55. Conditioned learning was described and demonstrated by :
- (A) Charles Darwin (B) Aristotle
(C) Ivan P Pavlov (D) Lamarck
56. Technic used to identify individuals by examining their DNA sequences :
- (A) DNA foot printing (B) DNA library
(C) Genetic library (D) DNA fingerprinting
57. Progressive denerative brain disorder :
- (A) Asphyxia (B) Alzheimer's disease
(C) Epilepsy (D) Parkinson's disease
58. Extra embryonic membrane forming a closed sac around the embryo :
- (A) Allantois (B) Chorion
(C) Amnion (D) Archenteron
59. A technique for recording the electrical activity of the brain :
- (A) ECG (B) EEG
(C) UV Scan (D) Scanning

60. Functional unit of Kidney :
- (A) Neuron (B) Axon
(C) Dynein (D) Nephron
61. The clinical test used to detect cervical cancer :
- (A) Ames test (B) Radio immune assay
(C) Paps smear (D) Chorionic villus sampling
62. Surgical remove of breast :
- (A) Mastectomy (B) Mamography
(C) Autogamy (D) Isogamy
63. Hyper secretion of aldosternone :
- (A) Cushings syndrome (B) Conns Syndrome
(C) Adrenal virilism (D) Eunochoidism
64. Causative agent of Middle East Respiratory Syndrome :
- (A) Corona virus (B) Papiloma
(C) SM virus (D) Rhabdovirus
65. Which of the following is NOT a neurotransmitter?
- (A) Acetyl choline (B) Dopamine
(C) Insulin (D) Serotonin
66. Which of the following bacteria play a key role in nitrogen fixation?
- (A) Pseudomonas (B) Bacillus typhi
(C) Clostridium (D) Agrobacterium tumifaciens
67. Type of dentition in humans :
- (A) Bunodont (B) Pleurodont
(C) Lophodont (D) Solenodont

68. Which mineral is essential to protect the sperms in male?
(A) Phosphorous (B) Magnesium
(C) Calcium (D) Selenium
69. Macrophages found in the liver :
(A) Preganglionic fibres (B) Kuffer cells
(C) Proprioceptors (D) Pacinian corpuscles
70. Last part of the vertebral column :
(A) Fascicule (B) Coronal suture
(C) Coccyx (D) Tendon
71. Contractile protein found in a muscle :
(A) Myosin (B) Rennin
(C) Sprain (D) Adductor
72. Allopurinol is used for the treatment of :
(A) Scurvey (B) Muscular dystrophy
(C) Gout (D) Poliomyelitis
73. Western blotting is used for the detection :
(A) DNA (B) Protein
(C) RNA (D) Enzymes
74. The book "Origin of species" is related to :
(A) Ecology (B) Molecular biology
(C) Evolution (D) Ethology
75. A protein digesting enzyme secreted by the pancreas :
(A) Chymotrypsin (B) Chyle
(C) Cholecystokinin (D) Trypsin
76. Artificially made insulin :
(A) Pepsin (B) Amylase
(C) Leptin (D) Humulin

77. Protein deficiency disease :
- (A) Kwashiorkor (B) Scurvy
(C) Rickets (D) Pellagra
78. Which is a tumor suppressor gene?
- (A) bcl2 (B) p⁵³
(C) Apaf (D) Bax
79. The method used for determination of age of fossils :
- (A) Immuno assay (B) Radio labelling
(C) Remote sensing (D) Carbon dating
80. Taq polymerase the key enzyme used in PCR is derived from :
- (A) Streptococcus (B) Bacillus thuringensis
(C) Thermas aquaticas (D) Cyanobacteria
81. All the restrictions in the matter of covering upper parts by Shanar women legalised with :
- (A) Royal proclamation of July 26th 1859
(B) Royal proclamation of November 1st 1857
(C) Royal proclamation of July 7th 1856
(D) Royal proclamation of August 1st 1858
82. W.T. Ringle Tab, a Christian Missionary who took interest in the introduction of Western education in Kerala belongs to :
- (A) Russia (B) Prussia
(C) Syria (D) Croetia
83. Right to Information Act came into being in :
- (A) 2005 (B) 2006
(C) 2008 (D) 2010
84. The social reformer named Perior involved in one of the important Satyagraha in Kerala :
- (A) Bardoli Satyagraha (B) Guruvayoor Satyagraha
(C) Payyannur Satyagraha (D) Vaikom Satyagraha

85. The first annual meeting of SNDP yogam met at the place :
- (A) Chempazhanti (B) Kadavankodam
(C) Varkala (D) Aruvipuram
86. The prominent daily 'Malayala Manorama' became a 'daily' from the date :
- (A) 16th January 1928 (B) 16th February 1928
(C) 20th January 1928 (D) 20th February 1928
87. Travancore Muslim Mahajana Sabha which look interest in the upliftment of Muslims in Kerala founded by :
- (A) Moulana Muhammed Ali (B) Choudhari Rahmath Ali
(C) Vakkom Abdul Khader Moulavi (D) Moulana Abdul Kalam Azad
88. The procedure for amending the constitution. We indebted to the constitution of :
- (A) Ireland (B) England
(C) South Africa (D) South America
89. The Keralite mentioned in the autobiography :
'My Experiments with truth' of M.K. Gandhi
- (A) G. Parameswaran Pillai (B) R. Balakrishna Pillai
(C) K. Govinda Pillai (D) Ramakrishna Pillai
90. The first Generation Feminist Anna Chandi was born in :
- (A) 1905 (B) 1900
(C) 1910 (D) 1906
91. The political leader arrested in June 1935 as a result of Abstention movement :
- (A) C. Kesavan (B) K. Kelappan
(C) T.M. Varghese (D) N.V. Joseph
92. The well known autobiography 'Kozhinja Ilakal' is related to :
- (A) Joseph Mundasseri (B) Joseph Rabban
(C) M.P. Paul (D) P.K. Varrier

93. The Article in our constitution dealing with the Election Commission :
- (A) Article 324 (B) Article 339
(C) Article 72 (D) Article 42
94. The Chief Justice who appointed as the Chairman of National Human Rights Commission in 2010 :
- (A) Justice R.M. Latha (B) H.J. Kenia
(C) Justice Fathima Beevi (D) K.G. Balakrishnan
95. Agnisakshikal is the one and only novel of :
- (A) Balamani Amma (B) Sugata Kumari
(C) Lalitambika Anterjanam (D) P. Vatsala
96. The social reformer who worked for the upliftment of the downtrodden people in the kingdom of Travancore was :
- (A) Swami Dayananda (B) Swami Vivekananda
(C) Vaikunta Swami (D) Swami Vagbadananda
97. The translation of Sakuntalam won the title 'Kerala Kalidasan' to :
- (A) A.R. Raja Raja Varma (B) Raja Ravi Varma
(C) Kerala Varma Valiya Koil Tampuran (D) Kottarakkara Tampuran
98. The founder-editor of Vivekodayam issued in April 1904 :
- (A) Kumaran Asan (B) Ullor. S. Parameswaraier
(C) Vallathol (D) Vailoppalli Sreedhara Menon
99. 'Travel to Rome' the first travelogue in Malayalam written by :
- (A) Dr. Herman Gundert (B) Benjamin Bailey
(C) Robert Bristow (D) Paremakkil Thoma kattanar
100. The most important Dalit leader of modern Kerala :
- (A) Ayyappan (B) Ayyan Kali
(C) K. Gopalan (D) Dr. Palpu