



DR ACADEMY

DO RIGHT FOR GENUINE EDUCATION

#42, 100FT ROAD,
KAMMAGONDANAHALLI,
JALAHALLI WEST,
BENGALURU - 560 015

HOSKOTE - MALUR ROAD,
ISRI CROSS, KATTIGENAHALLI,
JADIGENAHALLI HOBLI,
BENGALURU - 562114

PLOT NO.87, VAHINI NIVAS
MATRUSRI NAGAR COLONY,
HAFEEZ PET, MIYAPUR,
HYDERABAD - 500049

KCET EXAMINATION – 2022

SUBJECT : BIOLOGY (C4)

DATE :- 16-06-2022

TIME : 10.30 AM TO 11.50 AM

1. Amniocentesis is a process to:
- 1) Determine the sex of the foetus
 - 2) Determine any disease of heart
 - 3) Know about the disease of brain
 - 4) To grow cell on culture medium

Ans. 1

2. The first human like being is
- 1) Homo menthus
 - 2) Homo crectus
 - 3) Homo habilis
 - 4) Homo sapiens

Ans. 3

3. XO type of sex determination and XY type of sex determination are the examples of
- 1) Female Homogamety
 - 2) Male Heterogamety
 - 3) Female Heterogamety
 - 4) Male Homogamety

Ans. 2

4. Example of Non-Mendelian disorder:
- 1) Cystic fibrosis
 - 2) Haemophilia
 - 3) Down's syndrome
 - 4) Thalassaemia

Ans. 3

5. Gynecomastia is a symptom of
- 1) Cri-du-chat syndrome
 - 2) Down's syndrome
 - 3) Kline Felter's syndrome
 - 4) Turner's syndrome

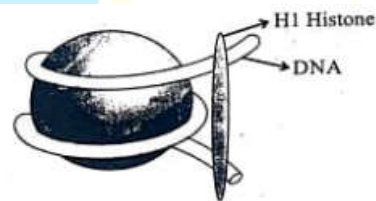
Ans. 3

6. The affected male in the pedigree chart is symbolized by:



Ans. 4

7. The given diagram represents:



- 1) Mesosome
- 2) Chromosome
- 3) Ribosome
- 4) Nucleosome

Ans. 4

8. Which of the following hormones is not secreted by human placenta?

- 1) FSH
- 2) hCG
- 3) Relaxin
- 4) Progesterone

Ans. 1

9. Which of the following is correctly matched?

- 1) Spores-Sponge
- 2) Conidia-Hydra
- 3) Gemmules-Amoeba
- 4) Bulbil-Agave

Ans. 4

10. The technique advised by a doctor to overcome the problem of infertility:

- 1) RTI
- 2) MTP
- 3) ART
- 4) RCH

Ans. 3

11. Which aspect forms the basis of DNA fingerprinting?
 1) The amount of DNA found in samples of blood, saliva and skin.
 2) The ratio of purines and pyrimidines present in DNA.
 3) The Sequence of DNA present in the ridges and grooves of finger-prints
 4) The Satellite DNA showing high degree of repetition in DNA segments

Ans. 4

12. Identify the most infectious and fatal type of malarial parasite:
 1) Plasmodium ovale
 2) Plasmodium vivax
 3) Plasmodium malariae
 4) Plasmodium falciparum

Ans. 4

13. The type of antibodies produced during the allergic reaction
 1) Ig M 2) Ig A 3) Ig E 4) Ig G

Ans. 3

14. One of the side-effect of the use of anabolic steroids in females
 1) Masculinisation 2) Loss of memory
 3) Hallucination 4) Cirrhosis of liver

Ans. 1

15. Which one of the following is a opiate narcotics?
 1) LSD 2) Barbiturates
 3) Morphine 4) Amphetamines

Ans. 3

16. The large holes in 'Swiss-Cheese' are made by a
 1) Fungus that releases a lot of gases during metabolic activities
 2) Machine
 3) Bacterium that produces methane gas
 4) Bacterium producing a large amount of CO₂

Ans. 4

17. Which vitamin is increases by 'LAB' in curd?
 1) Vitamin E 2) Vitamin C
 3) Vitamin B 4) Vitamin B₁₂

Ans. 4

18. Enzyme which is useful to remove the oily stains in laundry?
 1) Lipase 2) Renin
 3) Protease 4) Amylase

Ans. 1

19. DNA replicates semiconservatively was first shown in:
 1) Higher animals 2) Escherichia coli
 3) Human cell 4) Plants

Ans. 2

20. A series of experiments were conducted by Frederick Griffith in 1928, on transforming principle with:
 1) Streptococcus pneumoniae
 2) Escherichia coli
 3) Bacillus thuringiensis
 4) Salmonella typhimurium

Ans. 1

21. The number of codons effective in coding twenty amino acids:
 1) 20 2) 61 3) 32 4) 64

Ans. 2

22. An antibiotic resistance gene in a vector usually helps in the selection of
 1) Non-competent cells
 2) Competent cells
 3) Transformed cells
 4) Non-recombinant cells

Ans. 3

23. Silencing of specific mRNA in RNAi is by
 1) dsDNA 2) SSRNA
 3) dsRNA 4) ssDNA

Ans. 3

24. Cry-IAC effectively controls,
 1) Ring worm 2) Cotton bollworms
 3) Corn borer 4) Root nematode

Ans. 2

25. ADA deficiency can be cured by
 1) Heart Transplantation
 2) Bone-marrow Transplantation
 3) Liver Transplantation
 4) Kidney Transplantation

Ans. 2

26. Average natality rate in our village is 25, average mortality is 24, immigration 2 and emigration 3 and the net increase M population is:
1) 27 2) 0 3) 5 4) 10

Ans. 2

27. The term "Molecular Scissors" refers to
1) Taq polymerase 2) Polymerase-I
3) Polymerase-II 4) Restriction enzyme

Ans. 4

28. What does the sample of given base sequence represent?
5' - GAATTC - 3'
3' - CTTAAG - 5'
1) Palindromic sequence
2) Initiator codon at 5' end
3) Deletion mutation
4) Completion of replication

Ans. 1

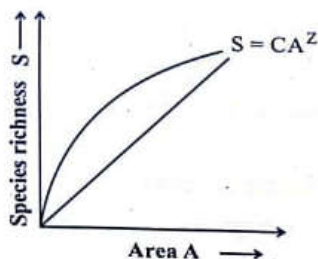
29. Gel electrophoresis is used for
1) Cutting of DNA into fragments
2) Construction of recombinant DNA by joining with cloning vectors
3) Isolation of DNA molecule
4) Separation of DNA fragments according to their size

Ans. 4

30. The amount of Photosynthetically active radiation captured by plants is
1) 12 - 20 percent 2) 20 - 30 percent
3) 2 - 10 percent 4) 60 - 70 percent

Ans. 3

31. The given graph represents



- 1) Species area relationship
2) Enzyme activity
3) Growth of organisms
4) Population growth

Ans. 1

32. Cuscuta is an example of
1) Predation 2) Broad Parasitism
3) Endoparasitism 4) Ectoparasitism

Ans. 4

33. Particulates of ___ size pose greatest risk to human health.
1) Less than 7.5 micrometers in diameter
2) Less than 2.5 micrometers in diameter
3) Less than 4.5 micrometers in diameter
4) Less than 3.5 micrometers in diameter

Ans. 2

34. Maintenance of constant internal environment is called as
1) Osmoregulation 2) Metastasis
3) Homeostasis 4) Thermoregulation

Ans. 3

35. The animals which are active during day time:
1) Crepuscular 2) Diurnal
3) Auroral 4) Vesporal

Ans. 2

36. Which of the following statement is incorrect related to biomes?
1) Low temperature and less rainfall is a characteristics of Tundra biomes.
2) Variation in temperature and mean precipitation accounts for the major biomes.
3) More rainfall and low temperature is the characteristics of deserts.
4) High temperature and minimum rainfall help to form grasslands.

Ans. 3

37. Different types of respiratory organs like gills, book gills, book lungs and trachea are present in
1) Annelids 2) Sponges
3) Molluscs 4) Arthropods

Ans. 4

38. Which of the following plants is used to extract Colchicine?
1) Tulip 2) Colchicum
3) Aloe 4) Asparagus

Ans. 2

39. Rows of S-shaped setae in the body of earthworm are present in all the segments, except
- 1) The first segment
 - 2) The last segment
 - 3) The first and last segment
 - 4) The first, last and clitellum

Ans. 4

40. Cell theory was formulated by
- 1) Schwann and Robert Brown
 - 2) Schleiden and Schwann
 - 3) Robert Hook and Robert Brown
 - 4) Schleiden and Robert Brown

Ans. 2

41. The type of Polysaccharide present in a cotton fibre
- 1) Glycogen
 - 2) Starch
 - 3) Insulin
 - 4) Cellulose

Ans. 4

42. Enzyme involved in crossing over
- 1) Lygase
 - 2) Recombinase
 - 3) Polymerase
 - 4) Endonuclease

Ans. 2

43. Kranz anatomy can be seen in
- 1) Maize
 - 2) Tomato
 - 3) Potato
 - 4) Pea

Ans. 1

44. Respiratory quotient of glucose is
- 1) 1.0
 - 2) 0
 - 3) 0.7
 - 4) 0.9

Ans. 1

45. A person suddenly starts coughing while swallowing food. This coughing would have been due to improper movement of
- 1) Tongue
 - 2) Epiglottis
 - 3) Diaphragm
 - 4) Neck

Ans. 2

46. Binomial nomenclature is introduced by
- 1) John Ray
 - 2) Carolus Linnaeus
 - 3) Lamarck
 - 4) Bentham and Hooker

Ans. 2

47. Bovine spongiform encephalopathy is caused by
- 1) Fungi
 - 2) Viroids
 - 3) Prions
 - 4) Virus

Ans. 3

48. Phycoerythrin and Floridean starch is found in
- 1) Red algae
 - 2) Blue – green algae
 - 3) Green algae
 - 4) Brown algae

Ans. 1

49. Menstrual cycle exhibited by
- 1) Tiger
 - 2) Cow
 - 3) Rat
 - 4) Apes

Ans. 4

50. An example of dioecious plant
- 1) Papaya
 - 2) Cucurbita
 - 3) Coconut
 - 4) Mango

Ans. 1

51. Stalk of the Stamen is
- 1) Peduncle
 - 2) Filament
 - 3) Pedicel
 - 4) Petiole

Ans. 2

52. The ovule of angiosperm is technically known as
- 1) Megaspore
 - 2) Megasporangium
 - 3) Megasporophyl
 - 4) Megaspore mother cell

Ans. 2

53. Typical mature embryosac of angiosperm is
- 1) 8 nucleated 1 celled structure
 - 2) 8 nucleated 8 celled structure
 - 3) 8 nucleated 7 celled structure
 - 4) 7 nucleated 8 celled structure

Ans. 3

54. One of the 2000 years old viable seed, discovered during the archeological excavation an King Herold's near dead sea.
- 1) Lupin
 - 2) Sunflower
 - 3) Phoenix dactylifera
 - 4) Maize

Ans. 3

55. The testis are situated outside the abdominal cavity in scrotum as it helps to
- 1) Regulates hormone secretion
 - 2) Store sperm
 - 3) Release sperm
 - 4) Maintain the low temperature

Ans. 4

56. Identify the odd one from the following
- 1) Isthamus
 - 2) Fimbriae
 - 3) Labia minora
 - 4) Infundibulum

Ans. 3

57. In which month of gestation, the first movements of foetus and appearance of hair on its head is observed?

- 1) 8th month
- 2) 1st month
- 3) 4th month
- 4) 5th month

Ans. 4

58. The most abundant type of WBC cells

- 1) monocytes
- 2) Basophils
- 3) Neutrophils
- 4) Eosinophils

Ans. 3

59. Filtration of blood during urine formation takes place in

- 1) Glomerulus
- 2) DCT
- 3) PCT
- 4) Collecting duct

Ans. 1

60. Corpus callosum connects the

- 1) Spinal cord with the brain
- 2) Two lobes of cerebellum
- 3) Two cerebral hemispheres
- 4) Cerebrum and cerebellum

Ans. 3

