

## Biology

1. Low partial pressure of oxygen in alveoli is due to

° sau O<sub>2</sub>

© Stability

° on (pO<sub>2</sub>).

2. Respiratory tubules are termed as bronchioles when they attain the diameter ----- or lesser:

e 12cm

o 1mm

o 1cm

o 12mm

3. Elastic fibers are absent in the walls of -----.

o Aorta

o Veins

o Arteries

© Capillaries

4. A type of blood cell that produces heparin is -----.

o Basophil

e Eosinophil

o Neutrophil

o Monocyte

5. Thoracic lymph duct of the meninges is called

e Superior vena cava

o inferior

o

me

6. Select the part of nephron which is not permeable to water and stops its outflows

e Glomerulus

ø Ascending loop

© Proximal tubule

e Descending loop

7. Vessels which carry blood to the glomerulus are called:

o Vesa recta

e Renal vein

© Afferent arterioles

© Deffernt arterioles

8, When water content in body becomes high what will happen:

e ADH release will be inhibited

° Aldosterone will be released

© ADH will be released in large amount i cori

© Anterior pituitary will oe rv

9, The major factor in producing a ret aN

° eter

© ADH ag only ys

ldosterone from

cate increase

What is the least selective process during urine formation:

e Reabsorption

© Secretion

e Pressure filtration

e Differential permeability

. The nerve impulse which jumps from node to node in myelinated neuron is called:

© Resting membrane potential

© Threshold stimulus

o Salutatory nerve impulse

o Initial nerve impulse

. The CNS is protected by:

© Three layers of meninges

© 4 layers of meninges

e One layers of meninges Aon

e 2 layers of meninges at Ratt

1

eS

1

hm

1

bho

1

Ww

. White matter of ?rh

e Sensory eth

o

re nerve fibers

ee nerve fibers

14, there are evidences that high level of aluminum can lead to the onset of:

° Parkinsons?s disease

e Lesch-Nyhan syndrome

e Aizheimer?s disease

° Fragile X syndrome

15, ----- is the structure in female in which fertilization takes place:

© Ovaries

° Cervix

o Uterus

° Oviduct

16, Which of the following directly develops into sperms:

° Primary spermatocytes

e Secondary spermatocytes

e Spermatids

© Spermatogonia

17, FSH and LH are secreted by the anterior pituitary gland as two largest and most important.

o Uterus

) HAN

ay ne

Ovaries hypothalamus

18. Select the organelle which is only present in animal cells:

© Centrioles

© Microtubules

eo RER

° Ribosomes

19. Syphilis is a sexually transmitted disease and can also damage:

o Hair

° =6P.N.S

o Heart

° Birth canal

20. Spongy bone is always surrounded by:

© Compact bone

Osteoblast cells

Cartilage

Osteoclast cells

21. Bone matrix is hardened in man

° SANA 4 I\

few tissues

°

WS cute

° Calcium phosphate

22. The number of bones forming skull in man is:

° 8

° 20

o 14

© 22

23. The spine consists of linear series of:

o 33 bones

° 12 bones

0 24 bones

© 7 bones

24. W.O.F changes occur when skeletal muscles contract:

° I-band shortens only

A-band shortens and Z lines move

I-band shortens and Z line oscillates

Actin filament, con

25. The thyroxine effect is mediated by:

° NANA bl

o gene ale

\\ePRotein metabolism

o Basal metabolic rate

26. All the hormones released by anterior pituitary are tropic hormones except:

0 TSH

e ACTH

e STH

© Gnadotrophin hormone

27. W.O.F is endocrine as well as exocrine:

ø Liver

© Thyroid

e Adrenals

© Pancreas

28. Ovulation is suppressed by progesterone:

© Only by inhibition of LH i cout

© Inhibition of FCH and ae ff anit

e Inhibition of LH and mat

e Inhibition of Hath ca

29. The antibody molec tena ?polypeptide chains:

° 0

WI

30, ----- cells survive for a few days and secrete a huge no of antibodies in blood, tissue fluid or

© Memory cells

ø T-lymphocytes

© B-lymphocytes

e Plasma cells

31. The intermediate protection from infection of snake bite can be obtained by:

© Active immunity

ø Passive immunity

ø Natural active immunity

e Vaccination

32. Chlorophyll molecule is embedded in: \

Ø Membrane of mitochondria Ø (fii Ø

© Membrane of S.E, Nat

© Thylakoid Me :

e Membrane of AR

33. Carotenoid ;

NA ?orange range

® Orange-red range

© Yellow-red range

e Blue-violet range

34, Chlorophyll ?a? and chlorophyll ?b? differ in one of the functional groups chlorophyll ?a? has:

© -CHO

Ø -CH<sub>3</sub>

° -OH

Ø -NH<sub>2</sub>

35. Glyceraldehyde-3-phosphate in the presence of ATP and reduced NADP from light dependent stage is

reduced to:

e 3-carbon compound

o 5- carbon compound

° Ribulose biphosphate Ø

Q

e 6-carbon compound

36, Calvin cycle occurs in: C \

° cytoplasm ?

Ø Cytoplasm of center

Stroma of chloroplast

© Roots of plants

37. Restriction enzyme EcoR1 cuts DNA to produce:

e Blunt ends

© Sticky ends

ø Non-palindromic ends

e Split ends

38, Restriction endonucleases are produced by:

° Fungi

e Bacteria

e Algae

o Viruses

39. DNA segments of different lengths can be separated by process of:

© Western blotting

ø Autoradiography

cou

e Blotting eye

° Gel electrophoresis

40, This is the 1<sup>st</sup> heat stable DNA polymerase

° Taq- polymerase

me e

we q- helicase

e Tag- SSBp

41, Patients of cystic fibrosis (CF) produce thick mucus because of faulty:

ø Trans membrane carrier

e Nations

e Cl-ions

e Mucus membrane



42. Chemicals used for destroying agricultural competitors are known as:

° Antibiotics

° Disinfectants

e Pesticides

° Chemotherapeutic agents

43, Process by which unrelated species evolve to functionally resemble each other is c ?anv

© Convergent evolution [6®

e Co-evolution

¢ Divergent evolution (aw

° Parallel evolution

44, W.O.F shows evidence of molecular biology:

?a Vit

° Development of pharyngeal arches in vertebrate embryo

agglutination of species

Comparison of genes and proteins in different species

© Study of vestigial organs

45, Large population size random mating no mutation and no emigration or immigration are the postulates of:

e Hardy Weinberg theorem

° Mendel's law of segregation

e Mendel's law of independent assortment

e Theory presented by

46. Pure breeding lines of pea were taken regarding seed shape ---- round and wrinkled and were crossed with no intermediate between parents all offsprings were found to be round. These results show.

e Co-dominance

° Incomplete dominance

© Dominance live relationship

com

© Over dominance relationship © Segui

47, Base substitution deletion or insertion?

° Chromosomes

° advantages

ation

ane

48, The condition in which the heterozygote has a phenotype intermediate between contrasting homozygous parents are called as:

e Dominance

e Co-Dominance

e Incomplete Dominance

☐ Complete Dominance

49, The interaction between different genes occupying different loci is:

e Dominance

e Co-Dominance

e Epistasis

e Pleiotropy

50. Locus stands for

° Position of gene on homologous

© Regions of chromosomes or loci

© Position of an allele within a DNA molecule

© Close regions together

51. Self fertilization and independent assortment of alleles result in:

0 3/16 wrinkled

peas wrinkled: 3/16 dwarf- round

16 tail- round: 3/16 dwarf- round

© 3/16 tail- wrinkled: 3/16 dwarf- round

52. As a result of cross fertilization of a true breeding pea plant having purple coloured flowers:

With what of white coloured flowers, the offsprings will have flowers with:

© 1/4 purple : 3/4 white

° All white

o 1/4 white ; 3/4 purple

° All purple

53. The gene for red-green colour blindness is present on:

e F-chromosome

© Autosome 7

© K-chromosome

o Autosome 9

54. W.O.F structures is present in both ? and animal cells aN Gua

© Centrioles

e Plastids

° Microtubule in

© Sieve- AQ

55. NS \ sent in:

° sicher plants

° Bacteria

e Lower animals

56. DNA molecule in prokaryotes is:

e Single circular, double standard molecule not bound by membrane

ø Double circular molecule

° Linear double standard molecule

e Single, circular, double standard, membrane bound

57. Nucleoid is a structure not found in:

- ° Carbohydrate
- e Spirochete
- e Cyanobacteria
- e Goblet cells

58. Cell wall structure of a cell of unknown origin was studied and was found to contain polysaccharide chain linked with short chain of amino acid... What it can be?

- e Bacteria
- e Cortex cells of fungi

59. Mesosomes are:

- ) S
- 50
- ° 60S
- ° 70S

60. Functionally mesosomes can be compared with:

- e Ribosomes
- e Polysomes
- e Mitochondrion
- e Golgi bodies

61. Students were asked to give a guess about a unicellular organism with darkly stained nucleus...

W.O.F can be straight away excluded from the list:

- o Paramecium
- ° Plasmodium
- e Amoeba
- e ?Lactobacillus

62. Binary fission is characteristic of cell 1 not of cell 2

- ¢ Pseudomonas

e Euglena

° coi

© Ecoj afte

\ AN Net es

63, -s-- pecific structures related to monosaccharides:

° Wet bond

e Maltose

° Keto group

e Fructose

64, ---neneeee are the major site for storage of glycogen in animals body:

e Muscle and liver

ç Around belly and hips

ç Around thighs and belly

° Liver and kidney

65. The number amino acids that have been found to occurs in cells and tissues are:

e 170

e 25

e 20

e 45 i cout

66. Most proteins are made up of ----- eo ree sn

e 20

e 170

67. If in li got us an higher proportion of unsaturated fatty then it will be:

e Oils

e Phenols

oe Waxes

o Fats

68. When x-ray are passed through crystalline DNA it shows helix making one twist every

o 2nm

° 34nm

© 3,4nm

o 4nm

69. Following is the structure of:

e Uracil

° Guanine

e Thyamine

e Cytosine or cori

70. All enzymes are ----- sin

e Fibrous i i)

© Lipoproteins

Lowry (ans

ya he

71. The reactants on which enzyme works are:

e Products

e Substrates

° Catabolites

° metabolites

72. W.O.F comprises of inorganic ions:

© Coenzymes

° Prosthetic

e Activators

© Apoenzyme

73. W.O.F is a non-cellular infeciuous entity:

e Mycoplasma

o Herpes virus

e Escherichia coli

° Diplococcus 0 aye:

74. The viruses can reproduces: Nal

y call

° Without inv ding

ieosis

9

75. The life cycle in which the phage kills the bacteria is known as

e Transduction

e Lytic cycle

e Temperate phage cycle

o Lysogenic phage cycle

76. \n W.O.F shapes out living symbiont Escherichia coli is found:

o Round

0 Spinal

o Oval

o Rod

77. Chitin a chemical found in exoskeleton of arthropods is also found in cell wall of;

o Bacteria

0 Cyanobacteria

o Fungi

o Algae

78. Snails are the intermediate hosts in:

o Fasciola hepatica

0 Schistoma

0 Taenia solium

0 Ancylosoma duodenale

79. Food is diverted in the oesophagus:

o Glottis

0 Cheeks

o Tongue

0 Enigottis

80. Following is the structure of gastric glands in stomachs wall where ?x? is:

o Mucosa

o Visceral fat cells

o Mucus cells

0 Oxyntic cells

81. Label the part ?Y?

o Pleura

o Chest cavity

o Diaphragm

o Intercoastal muscles

82. W.O,F is a respiratory disorder released to malnutrition:

o Cancer

o Emphysema

o Asthma

0 Tuberculosis