
1) The genome of influenza virus is made up of

- A) Single strand RNA
- B) Double strand DNA
- C) Single strand DNA
- D) Double stranded RNA

Correct option is A

2) Galantamine hydrobromide is a compound derived from

- A) Cannabis
- B) Coca
- C) English yew
- D) Daffodils

Correct option is D

3) Mark the correct match

- A) Haemophilia- blood cancer
- B) SA node-pacemaker
- C) ECG-brain
- D) Alpha cells-insulin

Correct option is B

4) Cells which kill cells that display foreign motifs on their surface are

- A) Platelets
- B) Cytotoxic T cells
- C) Antigen
- D) Red blood cells

Correct option is B

5) Chitin is a

- A) Lipoprotein
- B) Polysaccharide
- C) Glycoprotein
- D) Phospholipid

Correct option is B

6) Organization of photosynthetic pigments into clusters is

- A) Photosynthesis
- B) Photosystem
- C) Photosynthetic cluster arrangement
- D) Calvin system

Correct option is B

7) Amphibians are poikilothermic, therefore they used to hibernate in

- A) Winter
- B) Summer
- C) Autumn
- D) Spring

Correct option is A

8) All of the following are macronutrients except

- A) Cu ions
- B) Ca ions
- C) Mg ions
- D) K ions

Correct option is A

9) Purkinje fibres are connected with the impulse conducting system of

- A) Heart
- B) Brain
- C) Skin
- D) Nephron

Correct option is A

10) The alveoli represents the total surface area of

- A) 10-30m
- B) 30-60m
- C) 70-90m
- D) 90-110m

Correct option is C

11) Some marine fishes processes salt excreting organs known as

- A) Thyroid gland
- B) Pituitary gland
- C) Adrenal gland
- D) Rectal gland

Correct option is D

12) Tetanus is the infection of

- A) Respiratory system
- B) Nervous system
- C) Circulatory system
- D) Bones and Muscles

Correct option is B

13) ——— regulate the body temperature

- A) Hypothalamus
- B) Thalamus
- C) Hippocampus
- D) Amygdala

Correct option is A

14) A man has to face interview, but during his first five minutes before the interview he experiences sweating, increased heart rate and respiration. Which hormone is responsible for his restlessness

- A) Adrenocorticotrophic hormone
- B) Insulin and Glucagon
- C) Epinephrine and nor epinephrine
- D) Aldosterone

Correct option is C

15) Hypothalamus connected to the pituitary gland via

- A) Nerves
- B) Infundibulum
- C) Blood
- D) No connection

Correct option is B

16) 2nd meiotic division in oocyte is completed

- A) When oocyte is fertilized by sperm
- B) When ovum is discharged from the ovary

- C) Just before fertilization
 - D) Before the onset of menstruation
- Correct option is A**
-

- 17) Recombinants contain DNA from
- A) 2 different sources
 - B) Single source
 - C) 2 same sources
 - D) 3 same sources
- Correct option is A**
-

- 18) The inner surface of a kidney has a deep notch called
- A) Renal pelvis
 - B) Hilus
 - C) Medulla
 - D) Pyramids
- Correct option is B**
-

- 19) ——— is considered as a chief structural and functional unit of nervous system
- A) Cell
 - B) Neuron
 - C) Nephron
 - D) Brain
- Correct option is B**
-

- 20) The bacteriophage replicates only inside the
- A) Animal cell
 - B) Bacterial cell

- C) Fungal cell
- D) Both A and B

Correct option is B

21) ——— is stored in animal cells

- A) Starch
- B) Cellulose
- C) Sucrose
- D) Glycogen

Correct option is D

22) A bacterium which has a group of two or more flagella inserted at one pole of the cell

- A) Monotrichous
- B) Peritrichous
- C) Lophotrichous
- D) Amphitrichous

Correct option is C

23) The gametophyte of lycopsida is mainly

- A) Aerial
- B) Partly aerial and partly underground
- C) Underground
- D) Photosynthetic

Correct option is C

24) Lichen is the symbiotic association of a fungus with

- A) Bacteria
- B) Algae

C) Other fungus

D) Animal

Correct option is B

25) The deficiency of which micronutrient causes goiter formation

A) Iron

B) Zinc

C) Iodine

D) Sodium

Correct option is C

26) Diphtheria Vaccine is an example of

A) Inactive vaccine

B) Toxoid vaccine

C) Sub-unit vaccine

D) Live, attenuated vaccine

Correct option is B

27) The number of human spinal nerves are

A) 60

B) 62

C) 64

D) 66

Correct option is B

28) Which one of the following item gives its correct total number?

A) Cervical vertebra -7

B) Floating ribs in human -3

C) Auditory ossicles -8

D) Cranium bones -4

Correct option is A

29) Find mismatch

A) Thyroid gland - T3 and T4

B) Parathyroid gland - Calcitonin

C) Pancreas - Insulin

D) Gonads - Testes and Ovaries

Correct option is B

30) The simplest form of learning is

A) Insight learning

B) Imprinting

C) Latent learning

D) Habituation

Correct option is D

31) A pure breeding tall plant was crossed to a dwarf plant. What would be the probability of "Tt" genotype in F₂?

A) 0

B) 0.25

C) 0.5

D) 0.75

Solution:

$TT \times tt = Tt$ in F₁

Now

$F_2 = F_1 \times F_1$

$F_2 = Tt \times Tt$

$F_2 = TT, Tt, Tt, tt$

As

$TT = 1/4 = 0.25$

$Tt = 1/2 = 0.5$

$tt = 1/4 = 0.25$

So correct option is C

32) To the end of first trimester the embryo can now technically describe as a

A) Zygote

B) Infant

C) Toddler

D) Foetus

Correct option is D

33) How many pairs of homologous chromosomes are present in *Pisum sativum*?

A) Seven

B) Eight

C) Nine

D) Ten

Correct option is A

34) For hepatitis B, the incubation period is between

A) 4-20 weeks

B) 6-20 weeks

C) 2-26 weeks

D) 2-6 weeks

Correct option is A

35) Which wavelengths are mainly absorbed by chlorophyll?

- A) Violet, Blue and Red
- B) Green and Blue
- C) Violet and Orange
- D) Red And Indigo

Correct option is A

36) The biogas plant is a tank which is

- A) 5-10 feet deep
- B) 10-15 feet deep
- C) 15-20 feet deep
- D) 20-25 feet deep

Correct option is B

37) DNA polymerase III works always in

- A) 5'-2' direction
- B) 5'-3' direction
- C) 3'-5' direction
- D) 2'-5' direction

Correct option is B

38) Chemically, Hormones are

- A) Carbohydrates
- B) Proteins
- C) Steroids
- D) B and C

Correct option is D

39) The least toxic excretory product is

- A) Ammonia
- B) Urea
- C) Uric acid
- D) Fatty acid

Correct option is C

40) The form of immunity which inherit from mother is

- A) Active immunity
- B) Passive immunity
- C) Acquired immunity
- D) Innate immunity

Correct option is D

41) Opossum and Kola bear belong to sub class

- A) prototheria
- B) Eutheria
- C) Metatheria
- D) Monotremata

Correct option is C

42) Phosphatase belong to which group of the following?

- A) Lyases
- B) Ligases
- C) Hydrolases
- D) None of the above

Correct option is C

43) Oleic acid is a fatty acid with 18 carbon atoms. It breaks into 9 acetyl groups. It is estimated that these 9 acetyl would generate — ATP molecules

- A) 81
- B) 98
- C) 101
- D) 108

Correct option is D

44) Horsetails are included in class

- A) Pteropsida
- B) Lycopsida
- C) Psilopsida
- D) Sphenopsida

Correct option is D

45) Which one of the following bone is the only moveable portion of the skull?

- A) Maxilla
- B) Frontal bone
- C) Mandible
- D) Zygomatic

Correct option is C

46) Progesterone is secreted by

- A) Corpous luteum
- B) Ripening follicle
- C) Uterine epithelium
- D) Fertilized egg

Correct option is A

47) The scientific name of fresh water mussel is

- A) *Mytilus edulis*
- B) *Loligo pealeii*
- C) *Anodonta grandis*
- D) *Anodonta bairdi*

Correct option is C

48) *Potamogeton* is an example of

- A) Xerophyte
- B) Mesophyte
- C) Hydrophyte
- D) Halophyte

Correct option is C

49) _____ stimulates fruits ripening

- A) Cytokinin
- B) Abscic acid
- C) Ethylene
- D) Auxin

Correct option is C

50) A condition in which abnormally large volume of urine is produced is

- A) Polydipsia
- B) Polyuria
- C) Polyphagia
- D) Polyanypsida

Correct option is B

51) Sulphur bacteria belongs to sub group of bacteria called

- A) Beta-proteobacteria
- B) Alpha-proteobacteria
- C) Gamma-proteobacteria
- D) Delta-proteobacteria

Correct option is C

52) Nuclear mitosis occur in

- A) Plants
- B) Animals
- C) Fungi
- D) Monera

Correct option is C

53) Excess glucose is converted in the liver to glycogen in response to the hormone

- A) Glucagon
- B) Insulin
- C) Bile
- D) Both A and B

Correct option is B

54) During muscles relaxation the calcium ions are

- A) Released from sarcoplasmic reticulum into sarcoplasm
- B) Forced back from sarcoplasm to sarcoplasmic reticulum
- C) Further forced from sarcoplasmic reticulum into sarcoplasm

D) Neither released more nor forced back but remain constant

Correct option is B

55) DNA finger printing refers to

A) Technique used for identification of finger prints of individuals

B) Molecular analysis of profiles of DNA samples

C) Analysis of DNA samples using imprinting devices

D) Both A and C

Correct option is B

56) Functionally — pairs of cranial nerves are sensory in nature, — pairs are motor in nature while — pairs are mixed in nature.

A) 3, 4 and 5

B) 4, 5 and 3

C) 3, 5 and 4

D) 4, 3 and 5

Correct option is C

57) The bulbourethral glands produce

A) Acidic fluid

B) Alkaline fluid

C) Semen

D) Mucus

Correct option is D

58) Platyhelminthes are

- A) Bilaterally symmetrical and diploblastic
- B) Bilaterally symmetrical and triploblastic
- C) Radially symmetrical and triploblastic
- D) Radially symmetrical and diploblastic

Correct option is B

59) HIV destroys a type of defence cell in the body called — helper lymphocyte.

- A) TD₄
- B) T₄
- C) C₄
- D) CD₄

Correct option is D

60) *Acetabularia crenulata* has a ——— shape cap.

- A) Irregular
- B) Umbrella
- C) Regular
- D) Disc

Correct option is A

61) The ribosomes responsible for protein synthesis are present in cell

- A) Floating in cytosol
- B) Localized in the nucleus
- C) Bound to rough ER
- D) Both A and C

Correct option is D

62) ——— enzymes need a primer for the initiation

of its function

- A) RNA polymerase
- B) DNA polymerase
- C) Ligase
- D) Primase

Correct option is B

63) The percentage of fresh water on earth is

- A) 1%
- B) 3%
- C) 5%
- D) 7%

Correct option is B

64) The following are sexual reproduction methods in bacteria except

- A) Transformation
- B) Transduction
- C) Conjugation
- D) Binary fission

Correct option is D

65) The lipid bilayer makes the membrane differentially permeable barrier that allows the transport of

- A) Ionic materials
- B) Polar materials
- C) Non polar materials
- D) Glycoproteins

Correct option is C

66) Particular amino acid and tRNA molecule binds together by the action of an enzyme named

- A) tRNA synthetase
- B) Amino tRNA synthase
- C) tRNA ligase
- D) Aminoacyl tRNA synthase

Correct option is D

67) In male Luteinizing hormone is also known as

- A) ACTH
- B) ICSH
- C) TRF
- D) MSH

Correct option is B

68) The possible reason for cyanosis; one of the congenital heart disease is

- A) Formation of carboxy haemoglobin
- B) The high concentration of oxyhemoglobin
- C) Low level of CO₂
- D) Low level of haemoglobin

Correct option is A

69) Antibodies consist of ——— polypeptide chains

- A) 2
- B) 4
- C) 6
- D) 8

Correct option is B

70) The larva formed during the life cycle of annelida is

- A) Glochidium larva
- B) Bipinnaria larva
- C) Trochophore larva
- D) Tornaria larva

Correct option is C

71) Tmesipteris is an example of

- A) Horsetail
- B) Clubmosses
- C) Psilopsida
- D) Pteropsida

Correct option is C

72) Independent gametophyte and sporophyte are found in

- A) Selaginella
- B) Polytrichum
- C) Ectocarpus
- D) Liverwort

Correct option is C

73) In human the disease symptoms develop during the

- A) Log phase
- B) Lag phase
- C) Growth phase
- D) Decline phase

Correct option is A

74) The optimum pH of the enzyme urease is

- A) 7.8-8.7
- B) 7.0
- C) 4.5
- D) 8.0

Correct option is B

75) Which statement about chlorophyll is not true?

- A) It contains terminal carbonyl group
- B) It contains phyto tail
- C) It contains porphrin ring
- D) It contain magnesium

Correct option is A

76) The bond that is formed between two monosaccharide units is called

- A) Ionic bond
- B) Hydrogen bond
- C) Peptide bond
- D) Glycosidic bond

Correct option is D

77) The following histone proteins form a nucleosome complex except

- A) H1
- B) H2A
- C) H2B
- D) H3

Correct option is A

78) The safranin stain is suitable for

- A) Fungal hyphae
- B) Cytoplasm/Cellulose
- C) Blood cells
- D) Lignin

Correct option is D

79) In the human skull the unpaired bones are

- A) Frontal, Occipital, Ethmoid and Sphenoid
- B) Frontal, Ethmoid, Sphenoid and Zygomatic
- C) Ethmoid, Sphenoid, Zygomatic and Frontal
- D) Temporal, Sphenoid, Frontal and Ethmoid

Correct option is A

80) Ebners gland on the dorsal surface of the tongue secrete an enzyme

- A) Amylase
- B) Ptyalin
- C) Lingual lipase
- D) Both A and B

Correct option is C