

**KANNUR DISTRICT PANCHAYATH
DIET KANNUR**

SSLC MUKULAM MODEL EXAM- 2019

BIOLOGY

Time: 1½ hrs

Total Score:40

Instructions

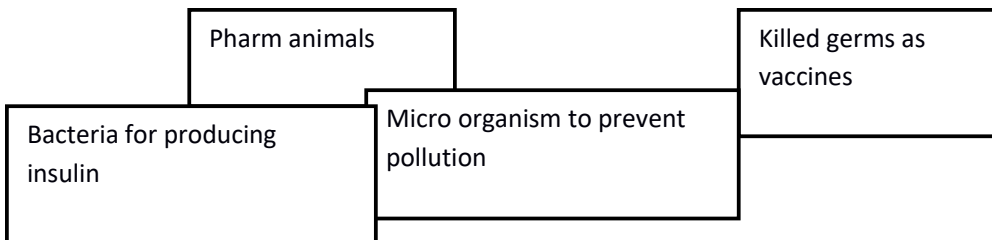
- First 15 minutes is given as cool off time
- Answer only on the basis of Instructions given
- Consider score and time while answering

Answer any five questions from Qn. No. 1 to 6 Each carries 1 score

- 1) Identify the word pair relationship and fill the missing word and mention the relationship between the pairs
B Lymphocytes : Bone Marrow
T Lymphocytes :
- 2) Which one of the following facilitate “child birth”
(a) Insulin (b) Oxytosin (c) Vasoprasin (d) Cortisole
- 3) Find out the correct statements related to the defence mechanism in plants
 - a. Cuticle in leaves produce antibodies
 - b. Bark protects the inner cells
 - c. Callose prevents entry of germs which have crossed the cell wall
 - d. Cell wall allows germs to enter the cell.
- 4) Identify the defects of eye and complete the table

Eye defect	Cause
a.....	Defect of Cone cells which receive red and green colours
b.....	Increase the pressure inside the eye

- 5) Find the odd one and write the common feature of others



- 6) Rewrite the following sentence by correcting the underlined word if it is wrong.
 - a. Robert Malthus explained that the accumulation of acquired characters led to the formation of species
 - b. Charles Darwin is related with Theory of natural Selection
 - c. A.I.Oparin formulates the Mutation Theory.

Answer any six from Qn. No.7 to 13. Each carries two score.

7) Subash arranged following links in human evolution in the ascending order of their cranial capacity.

Correct it if any mistake

Homosapians → Ardipithecus → Homoerectus → Homohabilis

8) Name the process indicated in the following illustrations and how does this process cause variation in off spring.



9) “Smoking cause stroke in brain”- name two such diseases associated with lungs.

10) Layas hand got injured and blood clotted in that area. The activity taking place there are given below. Complete it.

Tissue in the wonded area degenated to form the enzyme thomboplastin
a.

Thrombin converts the fibrinogen in the plasma to fibrin
b.

11. Indicators related to one endocrine gland is given below. Analyse them and answer the following questions.

- Situated just below Thalamus
- It helps the re absorption of water in the kidney.

a.Name the endocrine gland?

b. Which hormone is responsible for re absorption

12) Honey bees and ants live in colonies

a) Name the chemical substance which helps them to live together.

b) Write four uses of these chemical substance

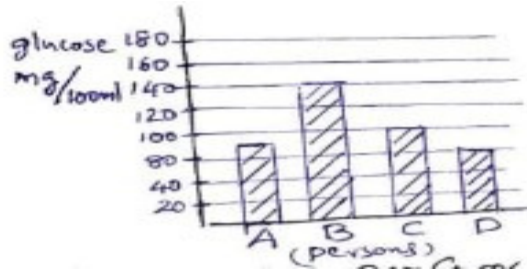
13) The process of protein synthesis is given below. Rearrange them correctly.

- * m RNA reaches ribosome
- * m RNA forms from DNA
- * m RNA reaches outside the nucleus

* Based on the information in mRNA protein is synthesized by adding different kinds of Amino acids

Answer any five from Qn. No. 14 to 20 . Each carries 3 score

14) Analyse the graph showing the blood glucose level of four persons before breakfast



- Which persons is a diabetic patient
- Write two actions of Insulin to prevent rise in the level of glucose in blood.

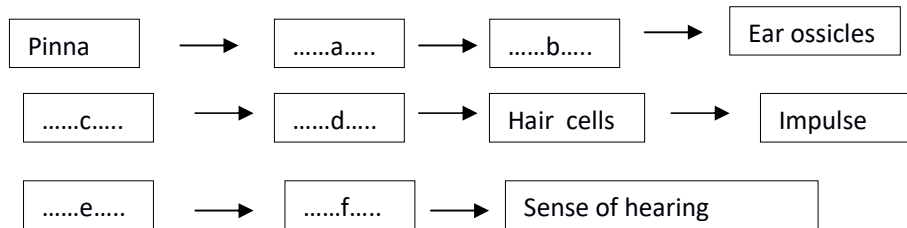
15) “Seeing a snake suddenly Meena frightened and ran away”

i) What are the changes that take place in the organs listed below

(a) heart (b) liver (c) Pupil (d) Trachea

(ii) Which nervous system get stimulated during this time.

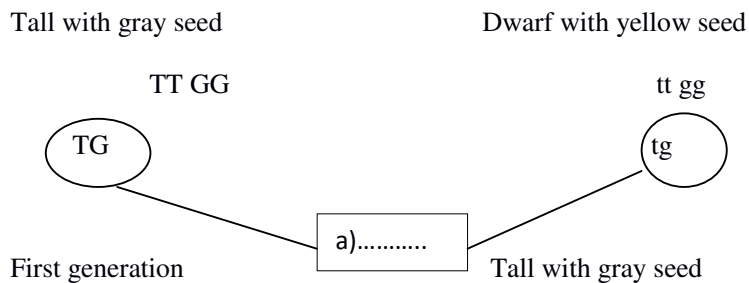
16) Complete the flow chart of the process of hearing



17) “Finches were one among the organisms observed and closely studied by Darwin in the Galapagos Islands.”

- Which peculiarity of the finches attracted Darwin
- How do these peculiarities help finches in their survival

18) Analyse the hybridisation process given below and fill in the blanks.



Second generation by self pollination produced Following types of off springs

Tall with gray seed

.....b.....

.....c.....

Dwarf with yellow seed

19) Given below is a slogan for awareness campaign against AIDS

Fear the Disease
Care the patient

- (a) Which Micro organism is responsible for AIDS
- (b) What are the ways by which this disease spreads

20) Report of Science Journal :

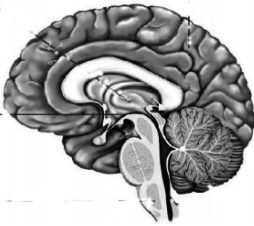
In 1984 Alec Jeffrey paved the ways for new era for culprit finding

Analyse the above Science Journal report and answer the questions

- (a) How is culprit can be identified by DNA Testing?
- (b) What is the Scope of DNA Testing?

Answer any two from Qn. No.21 to 23. Each carries 4 score

21) Redraw the diagram. Name and label the parts indicated below



- (a) Centre of thought
- b) Co ordinates muscular activities
- c) controls in voluntary actions

22) Wanted urgently blood for a patient

Analyse the Headline of a news report and answer the following questions

- a) What are the instances in which blood become necessary?
- b) What is the basis of blood grouping?
- c) Which part of the blood is deformed in sickle cell anemia patient

23) Arrange columns B and C according to the items in Column A

A	B	C
a) Blind Spot	Seen in between lens and cornea	Lense replacement surgery
b) Aqueous humour	Plenty of photo receptors	Maximum vision
c) Cataract	Part of Retina where optic nerve met	Nourishes the eye tissues
d) Yellow spot	Lens become opaque	No vision