

KANNUR JILLA PANCHAYATH - DIET KANNUR  
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SSLC MODEL EXAMINATION -JANUARY 2020

**BIOLOGY**

Time 1.30 hrs

score : 40 marks

Instructions :

1. 15 minutes is given as cool off time. This time is used for reading the question paper
2. Attempt the questions according to the instructions
3. consider score and time while answering

Answer **any five** from questions 1 to 6 , Each carries one score (5x1=5)

1. Observe the word pair relation and fill up

(a) Heartbeat : medulla oblongata :: intelligence :-----

b facilitation of childbirth : Oxytocin :: reabsorption of water : -----

2 Find the odd one and give reason

Gorilla ,Gibbon ,monkey, orangutan

3 “We blink our eyes when bright light fall suddenly on our eyes”

Write the name of this involuntary response ?

Which part of the nervous system control this action ?

4 Select from the box which is not related with theory of natural selection

over production , Acquired characters , struggle for existence , Origin of Species

5 “ It is not racial difference which makes the skin colour dark or light “

Which is the reason for colour difference in human skin ?

6 Name the eye defect or disease which is caused by the following situations

a. Prolonged deficiency of vitamin A

b Defect of cone cells

Answer **Any six** from questions 7 to 13 . each carries 2 Score (6 x 2=12)

7.

Hereditary factors also causes Cancer,but it is not completely consider as Hereditary disease

(a) How cancer cells are formed ?

(b Name two cancer treatment methods ?

8. Certain proteins produced through genetic engineering are used for the treatment of disease or symptoms for example Insulin : Diabetics

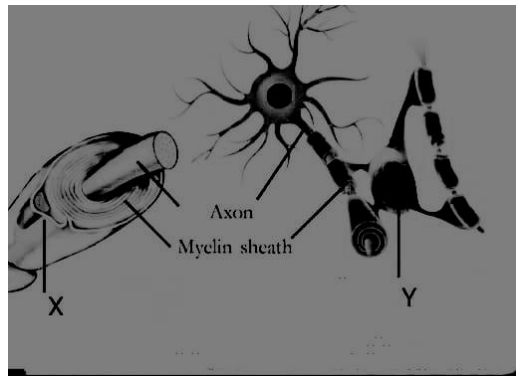
Mention the name of Protein required for treatment of

a) Viral Disease (b) Pain

9 . What are vaccines? Name the disease prevented by following vaccines

(a) B C G (b) O P V

10



(a) Identify X,Y and write their names ?

(b) Name the part where Y is found ?

11. Lymphocytes are produced in bone marrow and are of two types by considering the place where they mature

(a) Name the two types of Lymphocytes ?

(b) Name the place where they mature?

12. A dispute arise in the Labour room of a hospital for the new born baby by their parents

How DNA finger printing is helpful for solving this ?

13 Make suitable Pairs from the following box

House fly , Snake. Lateral Line, Eye spot, Shark, Ommatidia

Answer **Any Five** questions from 14 to 20 each carries 3 score

( 5x3= 15)

14 . Observe the illustration given below and answer the following questions

Self Pollination of Ist generation :

Axial flowers X Axial Flowers

Aa Aa

2 nd generation

AA, Aa, Aa, aa  
Axial Axial Axial Terminal  
flowers flowers flowers flowers

( a) write the dominant and recessive character in this case ?

(b) Why the recessive trait in the first generation appear in the next generation ?

15 “Somatotrophin promotes growth “

Explain how excessive production of somatotrophin affect

(a) During growth phase (b) After growth phase

16 Name the part of the Central Nervous system which co ordinates the repeated movements during Walking , Running etc ? How this part is protected ? Write its other functions ?

17. Raju recorded his observation after sowing seed in the vegetable garden in a table. Complete it suitably

Sl No	Observation	Plant hormone that helped
1	Seed germination and sprouting of leaves	-----
2	Promotes the growth of terminal bud	-----
3	Ripening of leaves and fruits	-----

18 .A Doctors case sheet of two patients

Patient A : Fever, throat pain and inflammation in the lymph gland of throat
Patient B ; severe fever, Headache , muscle pain, redness in eye

(a) Identify the Diseases

(b) How can we prevent these Diseases ?

19 . Hormones are Chemical messages that regulate cellular activities

(a) How hormones reach and influence the target cell ?

(b) Why other cells cant receive hormones ?

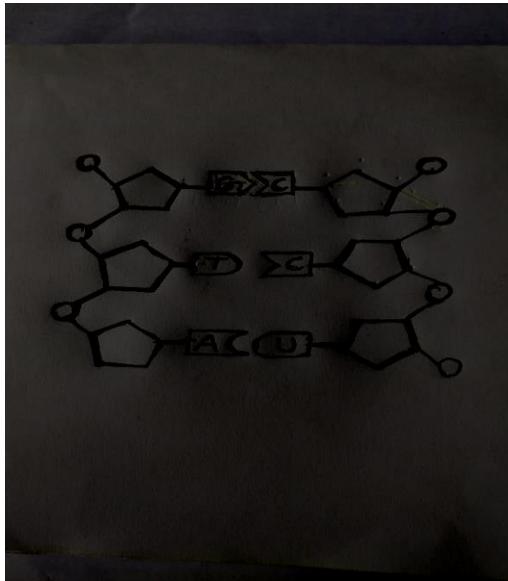
20 . Pick out the Life style disease from the table and write their causes

Sickle cell anaemia , Fatty Lever , Nipah , Stroke . Haemophilia , Heart attack
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Answer **Any two from** questions 21 to 23 . Each carries 4 score

( 4 x 2 = 8 )

21 . The arrangement of nucleotide in a DNA molecule is illustrated below . Re draw this after correcting mistakes if any



22 . Redraw the diagram . . Identify the parts mentioned and Label them



- (a) Part Where radial and circular muscles seen
- (b) The layer Cover the front part of sclera except cornea
- (c) Part where plenty of photo receptors seen

23 . Main stages in the history of Human Evolution is given below arrange them in sequence with respect to the development of brain, Mention the Human who first made weapons from stones and bone pieces

Homosapians, Homo habilis, Ardipithecus ramidus, homo erectus  
 Astralopithecus afarensis , Homo nianderthalensis