## KANNUR DISTRICT PANCHAYATH DIET KANNUR SSLC MUKULAM MODEL EXAMINATION 2018 BIOLOGY

STD X

Time 1<sup>1</sup>/<sub>2</sub>hrs Instructions Total score: 40

- 15 minutes is given as cool off time, This time is to be spent for reading the question paper.
- Answer all questions according to instructions

#### Answer any five from questions 1 to 6.Each question carries 1 score. (5x1=5)

Find the odd one and write the common features of others

- 1. cold, hunger, radiation, sound
- 2. Gorilla, chimpanzee, monkey, Orangutan

Make necessary corrections if any in the underlined portion of the statement given below.

3.(a) In human being there is <u>no difference in the number of chromosomes</u> in Male and female.

(b) In female it is 44+xy and male 44+xx

Identify the word pair relationship and fill in the blanks

4. Dropping of leaves	:	Abscisic acid	
Ripening of fruits		:	
5. Accumulation of an			
insoluble protein			
in the brain and neuron	get		
destroyed		:	Alzheimer's
Continuous and irregular	flow	of	
electric charges in the bra	in	:	
6. Pupil		:	muscles in the iris
Lens	:	•••••	•••••

## Answer any six from questions 7 to 13 .each questions carries 2 score. (6x2=12)

7. "The real culprit can be identified from a single hair"

Analyse the above statement and answer the following questions

- a. Write the name of technology used for identifying the culprit?
- b. What is the basis of this test
- 8. "Internal ear is situated inside a bony case in the skull?
  - a. In this which are the parts that helps in hearing and balancing of our body?
  - b. Name the fluid in internal ear?
- 9. Tabulate the following statements under heading "Related with B lymphocytes " and " Related with T lymphocytes"
  - a. Mature in the Thymus gland
  - b. Mature in the Bone marrow
  - c. Produce antibodies
  - d. Capable of destroying cancer cells and virus effected cells.
- 10. Mendel hybridized tall plant with Dwarf plant and produced First generation?
  - a. Which types of plant he got first generation?
  - b. How do the allele of the first generation differ from parental plants.
- 11. "During night we feel sleepy and at day time we wake up" How these daily activities happen in human body?
- Causes of certain life style diseases are given below .Identify the diseases.
  - a. deposition of excess fat in the liver
  - b. Rupture of blood vessels in brain, Block blood flow
- 13.

#### News report

# A patient identified with antigen 'A', 'D' and antibody 'b' is need of blood urgently

a. Name the blood group of the patient mentioned in above news?

b..Which blood group among the following can be accepted by the patient.

(i) A+ve (ii) B+ve (iii)AB+ve (iv) A-ve

# Answer any 5 from questions 14 to 19 . Each carries 3 Score (5x3=15)

14. "In a science seminar Thejaswini reported that even though a person with normal feeding habit undergo fasting for hours, the blood glucose level is maintained"

Do you agree with this opinion? Justify

- 15. "When light falls on the photoreceptors of an eye, it stimulated and produce impulses"
  - a. which are the photoreceptors in the eye?
  - b. Name the pigments found in them
  - c. Write the chemical reaction that happens when light falls on the pigment which helps in dim light vision?
- 16. Rearrange column 'B' with Column 'A'

Α	В	
a. Darwin	(i)	panspermia theory
b. Jean Baptist Lamarck	(ii)	theory of natural selection
c. Hugo de vries	(iii)	theory of inheritance of
		acquired characters
	(iv)	Mutation theory

17. Name the scientist who were awarded the Nobel prize for presenting a model of DNA.

What are the features of the double helical model presented by them?

- 18. What types of diseases are resisted by antibiotics. write the two side effects of regular use of antibiotics?
- 19. A class debate has been proposed to organize in the topic

" pharm animals – Scope and challenges"

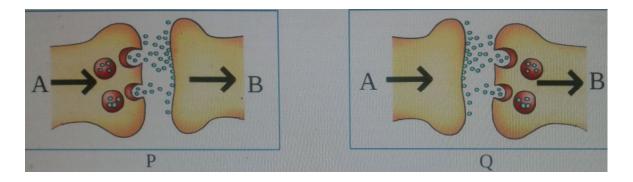
List out the scope and challenger to include in this debate.

# Answer any two from questions 20 to 22 Each question carries 4 score (2x4=8)

20. School science club decided to prepare a pamphlet related to "National Tuberculosis prevention programme."

Answer the following indicators to get the concept for preparing the pamphlet.

- a. Which is the causative agent for tuberculosis?
- b. Write 2 major symptoms of it
- c. Name three organs affected by this disease
- d. which vaccine is med for prevention of this disease
- 21. Observe the bellow diagram that shows the transmission of impulses from a neuron to other and answer the following questions.



- a. Name the part indicated in the above diagram
- b. which is the correct diagram P or Q ,Justify it
- c. Give one example for the chemical substance secreted from 'A'
- 22. Redraw the diagram, Identify the parts mentioned and label them



- a. The part through which sensory impulses reach the spinal chord
- b. The part through which impulses go out of the spiral chord
- c. The inner part of the spinal chord filled with cerebrospinal fluid