

## GOVT BOYS HR SEC SCHOOL, UTHIRAMERUR—603406.

Std:10 SCIENCE (Bio-L:17-23) Revision Test:4 Nov:2019. Marks:50 Time:1.30 Hrs.

## I. Choose the correct answer.

6X1=6

1. The essential parts of a flower are \_\_\_\_\_ .

- a) Calyx and Corolla      b) Calyx and Androecium  
 c) Corolla and Gynoecium      d) Androecium and Gynoecium

2. Male gametes in angiosperms are formed by the division of \_\_\_\_\_ .

- a) Generative cell      b) Vegetative cell  
 c) Microspore mother cell      d) Microspore

3. The number of chromosomes found in human beings are \_\_\_\_\_ .

- a) 22 pairs of autosomes and 1 pair of allosomes.      b) 22 autosomes and 1 allosome  
 c) 46 autosomes      d) 46 pairs autosomes and 1 pair of allosomes.

4. DNA fingerprinting is based on the principle of identifying ----- sequences of DNA

- a). single stranded      b). mutated      c) polymorphic      d). repetitive

5. Tobacco consumption is known to stimulate secretion of adrenaline. The component causing this could be

- a) Nicotine      b) Tannic acid      c) Curcumin      d) Leptin

6. Global warming will cause

- a) raise in level of oceans      b) melting of glaciers  
 c) sinking of islands      d) all of these

## II. Answer any 5 questions

(QNo: 8 is Compulsory)

5X2=10

## 7. Fill in the blanks

- i). A capacity of 100 litres solar heater can save upto \_\_\_\_\_ units of electricity per year.  
 . ii) . The world's largest and tallest wind turbine is situated in \_\_\_\_\_

8. Draw and Identify the parts



## 9. True or False, if false write the correct statement

- i). Nuclear energy is a renewable energy.  
 ii). In leukemia both WBCs and RBCs increase in number.  
 10. What precautions can be taken for preventing heart diseases ?  
 11. State the applications of DNA fingerprinting technique.  
 12. What do you understand by the term phenotype and genotype?  
 13. Write a short note on editor and its types?

**14.Assertion:** Hybrid is superior than either of its parents.

**Reason:** Hybrid vigour is lost upon inbreeding

- a. Assertion is correct and reason is wrong                      b. Reason is correct and the assertion is wrong  
c. Both assertion and reason is correct                              d. Both assertion and reason is wrong.

**III. Answer any 5 questions (Q No 16 is compulsory)**

**5X4=20**

15. With a neat labelled diagram describe the parts of a typical angiospermic ovule.

16. Explain the Types of Chromosomes based on the position of Centromere

17. Why is Archaeopteryx considered to be a connecting link?

**18. Match the following**

- |                 |   |
|-----------------|---|
| a). Sonalika    | -- <i>Phaseolus mungo</i>                     |
| b) IR 8         | -- Sugarcane                                  |
| c). Saccharum   | -- Semi-dwarf wheat                           |
| d). Mung No. 1  | -- Ground nut                                 |
| e). TMV – 2     | -- Semi-dwarf Rice                            |
| f). Insulin     | -- <i>Bacillus thuringiensis</i>              |
| g). Bt toxin    | -- Beta carotene                              |
| h). Golden rice | - first hormone produced using rDNA technique |

19. Name any three foods that are to be avoided and included in the diet of a diabetic patient. Why should it be followed?

20. What are the advantages of using biogas?

21. How does rainwater harvesting structures recharge ground water?

22. How do you differentiate homologous organs from analogous organs?

**IV. Answer any two**

**2X7=14**

23. i). State the importance of biofertiliser.

ii) .Suggest measures to overcome the problems of an alcoholic.

**(OR)**

24. How is the structure of DNA organised? What is the biological significance of DNA?

25. Write the events involved in the sexual reproduction of a flowering plant.

i). Discuss the first event and write the types.

ii).. Mention the advantages and the disadvantages of that event.

iii). Why are the human testes located outside the abdominal cavity? Name the pouch in which they are present .

**(OR)**

26. i). Organic farming is better than Green Revolution. Give reasons

ii) What precautions can be taken for preventing heart diseases ?

**xxxOxxx**

**VVR / Utr**