

**St. Ursula Girls' High School & Junior College, Nagpur**  
**FINAL EXAMINATION 2020**

**Class : IX (A,D,E,F,G)**

**Time : 2 hrs.**

**Marks : 40**

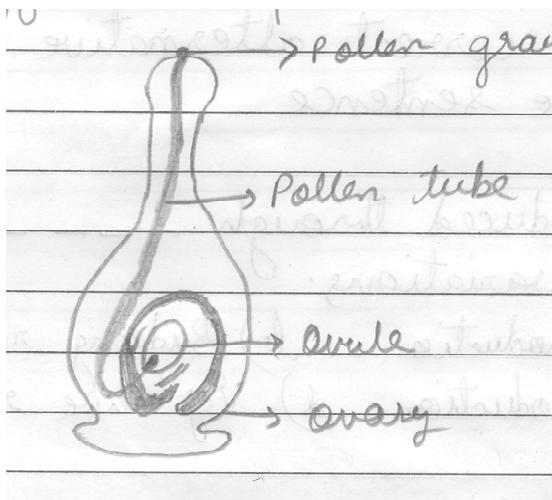
**Subject : Science II**

**Q1.A) Choose the correct alternative and rewrite the sentence. (5)**

- i) Organisms produced through \_\_\_\_\_ show major variations.
  - a) Sexual reproduction
  - b) Budding reproduction
  - c) Asexual reproduction
  - d) Vegetative reproduction
- ii) GMRT is used for \_\_\_\_\_ waves
  - a) Light
  - b) visible light
  - c) radio
  - d) wavelength
- iii) A group of cells having the same origin same structure and same function is called as \_\_\_\_\_
  - a) Body
  - b) tissue
  - c) Organ system
  - d) organs
- iv) The minute space between two adjacent neurons is called as \_\_\_\_\_
  - a) New cell
  - b) Dendrite
  - c) Axon
  - d) Synapse
- v) Chromosomes are mainly made up of \_\_\_\_\_
  - a) DNA
  - b) RNA
  - c) Genes
  - d) Proteins

**Q. 1 B) Answer the following questions (5)**

- 1) Identify the odd one:  
Xylem, Phloem, Permanent tissue, Meristematic tissue
- 2) Find out the co-relation :  
Women : Turner syndrome : Men : \_\_\_\_\_
- 3) Identify the tropism in the given diagram :



**4) Write True or False :**

Light is an electromagnetic wave.

**5) Name the following :**

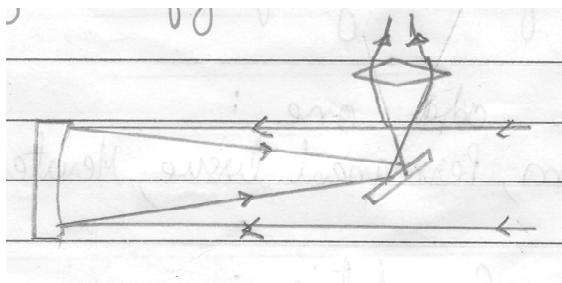
Name the place where the biggest optical telescope is situated in India.

**Q. 2 A Give Scientific Reasons (any 2) (4)**

- i) X-ray telescope cannot be based on the earth
- ii) Bones cannot be folded
- iii) It is wrong to avoid living with a person suffering from a genetic disorder.

**Q. 2 B Answer the following (any 3) : (6)**

i) Study the figure and answer the following questions.



- a) What type of telescope is shown in the figure ?
- b) Which type of mirror does the telescope use?

ii) Write a short not on : Sericulture

iii) Differentiate between :

Simple tissue and compare tissue in plants

iv) Define : a) Biotechnology

b) Tissue culture

v) Explain the construction of Galileo's telescope

**Q. 3. Answer the following (any 5) : (15)**

i) Complete the paragraph with the help of given alternatives :

(Nerve, Muscle Cell, impulse, dendrite, synapse, axon, reflex action, cell body)

The milk was on the stove. Rasika was engrossed watching television. She smelled something burning. She ran towards the kitchen. The milk was boiling over. She held the vessel with her bare hands but, screaming, she let it go at once. This activity was controlled by \_\_\_\_\_ cells. Special ends of in these cells collected the information, from where it was transferred to the \_\_\_\_\_ and then towards the terminal end of the \_\_\_\_\_. The chemicals produced at the terminated end passed through the minute space i.e. \_\_\_\_\_. In this way, \_\_\_\_\_ were conducted in the body and the process of \_\_\_\_\_ was completed by conducting the impulses from \_\_\_\_\_ to \_\_\_\_\_ .

ii) Draw a neat, well labelled diagram of the Newtonian telescope.

iii) Write the names of the following tissues :

- a) Tissue lining inner surface of mouth
- b) Tissue joining muscles and bones.
- c) Tissue responsible for increasing height of plants.

iv) Complete the given chart :

A	B	C
a) Diabetes	_____	Effect on blood glucose level
b) _____	Monogenic disorder	Pale skin white hair
c) Turner syndrome	44+x	_____

v) Draw neat, well labelled diagram of Newe cell and explain its structure in detail

vi) Justify the Statement :

Rearing of sheep is a livestock.

vii) Which type of telescopes can be made using a concave mirror, conver mirror, plane mirror and a lens. Draw diagrams of these telescopes

viii) Explain Mendel's Monohybrid progeny with the help of any one cross. Mention the genotypic ratio and the phenotypic ratio.

**Q. 4. Answer the following (any 1)**

**(5)**

i) Name the hormones of the following endocrine glands and the function of each

a) Pituitary

b) Thyroid

c) Adrenal

d) Thymus

e) Ovary

ii) Explain the construction of a ratio telescope.

