MODEL QUESTION PAPER

General Science Part – II - (Biological Science) (English Version) CLASS – X Part A & Part B

Time: 1.30 Hours] [Max. Marks: 40

Instructions:

- 1. Read the question paper carefully and understand.
- 2. Answer the guestions under **Part A** in the answer sheet provided.
- 3. Part A contains three sections: section-I, II and III.
- 4. There is an internal choice to the questions under section- III.
- 5. Part B Answers should be written in the given brackets and attach to the part A answer sheet.
- 6. Write the answers following the instructions given in each section.

Part-A

Time: 1 Hour 15 min] Marks: 30

SECTION - I

Instructions: $[3 \times 2 = 06]$

- i. This section contains <u>3</u> very short answer questions.
- ii. Answer ALL the questions.
- iii. Write the answer in 3-4 sentences.
- iv. Each question carries 2 marks.
- 1) What happens if transpiration doesn't takes place in tall trees?
- 2) Write the materials required to observe internal structure of mammalian heart.
- 3) Write the general principles to be followed in daily life to avoid indigestion problem.

SECTION-II

 $[3 \times 3 = 09]$

Instructions:

- i. This section contains **3** short answer questions.
- ii. Answer ALL questions.
- iii. Write the answer in 5-6 sentences.
- iv. Each question carries 3 marks.
- 4) Write any three evidences to prove the Darwin's Theory of Evolution.
- 5) Observe the following table and answer the questions given below:

Endocrine Glands	Hormones	Effect of hormones	
Adrenal	Adrenaline	Emotions	
Pituitary	Somatotrophin	Growth	
Ovary	Estrogen	Secondary Sexual Characters	
Testes	Testosterone	Secondary Sexual Characters	

- i. Which hormone is exclusively present only in females?
- ii. Which hormone is responsible for the development of secondary sexual characters in males?
- iii. Identify the endocrine glands present in both males and females?
- 6) Write any three measures to be followed to conserve natural resources in your daily life.

SECTION - III

 $[3 \times 5 = 15]$

Instructions:

- i. This section contains **3** essay type of questions.
- ii. Answer **ALL** the questions.
- iii. There is an internal choice for each question.
- iv. Write the answer in **8-10** sentences.
- v. Each question carries 5 marks.
- 7) Explain the procedure and precautions of an experiment which proves the presence of starch in leaves.

(OR)

Explain the procedure and observations of an experiment "Action of Saliva on flour."

8) Write any five modes of asexual reproductions in living organisms.

(OR)

Explain the cardiac cycle.

9) Draw the pyramid of numbers in a pond ecosystem and explain

(OR)

Draw the labelled diagram of *Datura* flower and explain essential organs.

General Science Part-II - Biological Science (English Version) CLASS – X Part B

Time: 20 Minutes] [Max. Marks: 10

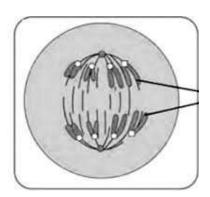
Instructions:

- 1. Write the answers to the questions under **Part B** on the question paper itself and attach it to the answer book of Part A
- 2. Each question carries 1 mark
- 3. Marks will not be awarded in any case of overwriting, rewritten or erased answers.
- 4. Write the capital letter (A,B,C,D) showing the correct answer for the following questions in the brackets provided against them.

1.	Identify the pair of water soluble vitamins from the following.	()		
	(A) Calciferol – Niacin				
	(B) Retinol – Thiamin				
	(C) Biotin – Ascorbic acid				
	(D) Pantothenic acid - Tocoferol				
2.	Identify the missing product in the following equation	()		
	$C_6H_{12}O_6 + 6O_2 \longrightarrow ? + 6H_2O + Energy$				
	(A) 6O ₂				
	(B) 6CO ₂				
	(C) Ethanol				
	(D) Lacticacid				
3.	Identify the blood vessel which carries deoxygenated blood	()		
	(A) Systemic artery				
	(B) Coronary artery				
	(C) Pulmonary vein				
	(D) Pulmonary artery				

4.	Match the following:				()		
	a) Nematoda	()	i) Flame cells				
	b) Echinodermata	()	ii) Renette cells				
	c) Platyhelmenthes	()	iii) Metanephridia				
	d) Mollusca	()	vi) Water vascular system				
	(A) a-ii ; b- iv ; c-iii ; d-i							
	(B) a-iii ; b- ii ; c-i ; d-iv							
	(C) a-ii ; b- iv ; c-i ; d-iii							
	(D) a-i ; b- iI ; c-iv ; d-iii							
5.	Identify the pair of hormones	s secret	ed by P	ituitary gland	()		
	(A) Follicle stimulating hormone; Estrogen							
	(B) Progesterone; Adrenaline							
	(C) Adrenaline; Gonadotropin							
	(D) Follicle stimulating hormone; Vasopressin							
6.	Identify the correct sentence	from t	he follo	wing	()		
	(A) Pollen grain is a diploid structure.							
	(B) Embryosac is a female gametophyte in flowering plants.							
	(C) In Angiosperms endosperm is formed before fertilization.							
	(D) Zygote develops into emb	oryo sad	С					
7.	Nostrils → Pharynx → Lary	ynx → [E	Bronchus → Bronchioles → Alveo	olus─►	Blood		
	Identify and fill the words in sequence that should be in the above boxes ((A) Trachea, nasal cavity.							
	(B) Nasal cavity, epiglottis.							
	(C) Nasal cavity, Trachea.							
	(D) Epiglottis, Alveoli.							
8.	Identify the function of kidne	y from	the foll	owing.	()		
	(A) Respiration							
	(B) Circulation							
	(C) Reproduction							
	(D) Excretion							

- 9. Identify the secondary metabolites of the plants used in the preparation of varnishes in your daily life. ()
 - (A) Resins
 - (B) Tannins
 - (C) Latex
 - (D) Alkaloids
- 10. Identify the stage of Mitotic cell division shown in the following figure.



- (A) Prophase
- (B) Metaphase
- (C) Anaphase
- (D) Telophase