

	<b>Sample Paper-II</b>		
<b>Class:</b>	XI Biology		
<b>Time:</b>	02:30 Hrs.		
<b>M.M:</b>	75		

## Personal Information

**Student's Name:-** \_\_\_\_\_ **Father's Name:-** \_\_\_\_\_

**City:-** \_\_\_\_\_ **Mobile No:-** \_\_\_\_\_ **Exam Date:-** / /2023

**Studying in Class:** \_\_\_\_\_ **Appearing for class:-** \_\_\_\_\_ **Board:** \_\_\_\_\_

### GENERAL INSTRUCTIONS:

- All questions are compulsory.
- Section A contains 10 questions (from 1-10) of Mathematics.
- Section B contains 15 questions (from 11-25) of Physics.
- Section C contains 15 questions (from 26-40) of Chemistry.
- Section D contains 25 questions (from 41-65) of Biology.
- Section E contains 09 questions (from 66-74) of English.

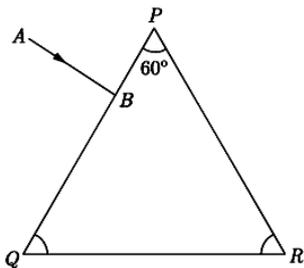
Mathematics (10)	Physics (15)	Chemistry (15)	Biology (25)	English (10)	OBTAINED MARKS (75)

Section-A Mathematics		
Q.N	Questions	Answers
1.	The decimal expansion of the rational number $\frac{14587}{250}$ will terminate after ..... number of digits.	
2.	If LCM (77, 99) = 693, then HCF (77, 99) is ..... ?	
3.	If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is ..... ?	

4.	The pair of equations $7x - y = 5$ ; $21x - 3y = 10$ represents graphically as ..... lines.	
5.	The equation $2x^2 + kx + 3 = 0$ has two equal roots, then the value of k is ..... ?	
6.	If $2x$ , $x + 10$ , $3x + 2$ are in A.P., then x is equal to ..... ?	
7.	In $\triangle ABC$ , $DE \parallel AB$ . If $CD = 3$ cm, $EC = 4$ cm, $BE = 6$ cm, then DA is equal to ..... ?	
8.	The distance of the point $(\alpha, \beta)$ from the origin is ..... ?	
9.	If $x \tan 45^\circ \sin 30^\circ = \cos 30^\circ \tan 30^\circ$ , then x is equal to ..... ?	
10.	Find the angle of elevation of the sun when the shadow of a pole h m high is $\sqrt{3} h$ m long?	

**Section-B**  
**Physics**

11.	The refractive index of glass is $\frac{3}{2}$ . The velocity of light in glass is _____ (The speed of light in vacuum/air is $3 \times 10^8$ m/s)	
12.	A concave mirror produces three times magnified (enlarged) real image of an object placed at 10 cm in front of it. Where is the image located?	
13.	Twinkling of stars is due to _____	
14.	The power of a concave lens of focal length of 2 m is-	
15.	Which colour suffers least deviation on passing through a prism?	
16.	If angle of deviation through a prism of angle $60^\circ$ is $40^\circ$ , angle of incidence (being equal to angle emergence) would be:	
17.	Which of the colours of visible light has maximum frequency?	
18.	The optical density of our atmosphere _____ with increase in altitude.	

19.	<p>In given figure, a light ray <math>AB</math> is incident normally on one face <math>PQ</math> of an equilateral glass prism. The incident angles at face <math>PR</math> is:</p> 	
20.	What is the resistance of a short circuit wire?	
21.	Write the expression of power in terms of current (I) and resistance (R).	
22.	If $n$ resistors of equal resistances are connected in parallel, then their equivalent resistance will be ____	
23.	Write the name of the scientist who discovered the magnetic effect of current.	
24.	What is the direction of magnetic field lines inside the bar magnet?	
25.	By which rule we can determine the direction of magnetic field acting on the electron if magnetic force is given.	
<b>Section-C</b> <b>Chemistry</b>		
26.	What is the role of oxidising agent in a reaction?	
27.	Which is the brown coloured gas evolved when lead nitrate crystals are heated in a dry test tube?	
28.	Name two salts that are used in black and white photography.	
29.	What is the chemical formula of baking soda?	
30.	Name the chemical substance which constitutes bees sting.	
31.	Name the gas evolved when dilute HCl reacts with sodium hydrogen carbonate.	

32.	The <i>pH</i> of rain water collected From two cities A and B was found to be 6 and 5 respectively. The water of which city is more acidic?	
33.	Name the process used for the enrichment of sulphide ore.	
34.	Arrange the following metal in order of their decreasing reactivity: Fe, Zn, Ca, Mg, Ag.	
35.	Name the non-metal which can conduct electricity.	
36.	Name a metal which reacts with very dilute nitric acid to evolve hydrogen.	
37.	A family of organic compounds has the functional group '-CHO'. What is its name?	
38.	Which organic compound is added to make ethanol unfit for drinking purposes?	
39.	Write IUPAC and common names of (a) $CH_3COCH_3$ (b) $C_2H_5COOH$	
40.	Which of the following belong to the same homologues series? $C_3H_8, C_4H_8, C_4H_6, C_3H_6$ .	

**Section-D**  
**Biology**

**Give one word for:**

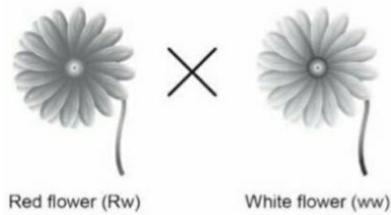
41.	Deficiency disease caused due to lack of iodine.	
42.	Hormone responsible for wilting in plants.	
43.	Plant on which Mendel has performed his experiment.	
44.	Effect which keeps earth warm.	
45.	Surgical contraceptive in male.	

**Match the terms in column I with those in column**

Column-A	Column-B
Amoeba	Grafting
Mango	Gigantism
Touch me not plant	Binary fission
Growth hormone	Gametes
Sexual reproduction	Nastic movement

46.	Amoeba	
47.	Mango	
48.	Touch me not plant	
49.	Growth hormone	
50.	Sexual reproduction	
	<b>Fill in the blanks with appropriate term.</b>	
51.	Garden and crop field are _____ ecosystem.	
52.	Traits develop during life time is called as _____ traits.	
53.	_____ is the common method of multiplication in hydra and yeast.	
54.	When a sperm having X-chromosome fuses with the ovum, the child born will be_____ .	
55.	_____movements occur along the gut	
	<b>Answer the following questions.</b>	
56.	What is the mode of nutrition in fungi?	
57.	Name the hormone responsible for phototropic movement in plants.	
58.	What is the functional unit of the environment comprising of the living and non- living components?	
59.	What are the chromosomes XY and XX known as?	
60.	If a harmful chemical enters in food chain comprising snakes, peacock, mice and plants, which of these organisms is likely to have the maximum concentration of this chemical in its body?	
	<b>Answer the following questions.</b>	
61.	A plant with red flower(Rw) is crossed bred with a plant with white flower(ww). There are two variations of the gene controlling the colour of the flower The gene for red flower (R) is dominant over that for white flower(w)	

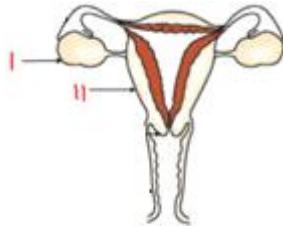
What percentage of the plants is likely to produce white flowers



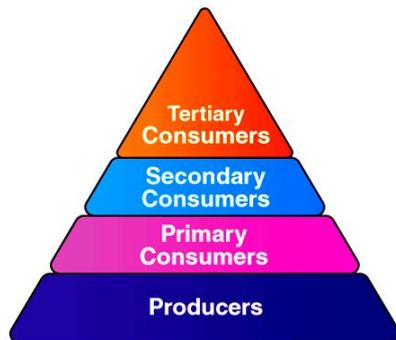
The Punnett square shows the result of the cross.

	w	w
R	Rw	Rw
W	ww	ww

62. Label the part marked as (ii) in the figure given below.



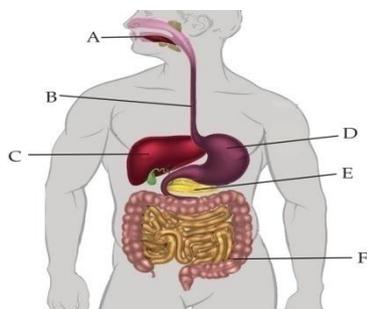
63. The picture shows the different trophic levels of an ecosystem. Which level consists of herbivores?



64. Identify the method of vegetative propagation depicted in the given figure



65.	<p>The diagram below shows the human alimentary canal.</p> <p>A, B, C, D, E, and F are four different organs that are the parts of canal.</p> <p>Secretion of which of the labeled parts help in emulsification of fats.</p>	
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**Section-E**

**English**

**Read the following passage carefully and answer the following questions.**

During our growing up years we as children were taught - both at home and school - to worship the photos and idols of the Gods of our respective religions. When we grew a little older, we were to read holy books like the Bhagwad Gita, Bible and Quran; we were told that there are a lot of life lessons to be learnt from these holy books. We were then introduced to stories from our mythologies which taught us about ethics and morality- what is good and what is bad. I also learnt to be respectful towards my parents who made my life comfortable with their hard work and love and care, and my teachers who guided me to become a good student and a responsible citizen.

Much later in life, I realised that though we learn much from our respective holy books, there is a lot to learn from our surroundings. This realization dawned upon me when I learnt to enquire and explore. Everything around us- the sun, the moon, the stars, rain, rivers, stones, rocks, birds, plants and animals - teach us many valuable life lessons.

No wonder that besides the scriptures, in many cultures nature is also worshipped. The message that we get is to save our environment and maintain ecological balance. People are taught to live in harmony with nature and recognize that there

	<p>is God in all aspects of nature.</p> <p>Nature is a great teacher. A river never stops flowing. If it finds an obstacle in its way in the form of a heavy rock, the river water fights to remove it from its path or finds an alternative path to move ahead. This teaches us to be progressive in life, and keep the fighting spirit alive.</p> <p>Snakes are worshipped as they eat insects in the field that can hurt our crops, thus protecting the grains for us. In fact, whatever we worship is our helper and makes our lives easy for us. There are many such examples in nature, but we are not ready to learn a lesson. Overcome with greed, we are destroying nature. As a result, we face natural disasters like droughts, floods and landslides. We don't know that nature is angry with us.</p> <p>However, it is never too late to learn. If we learn to respect nature, the quality of our life will improve.</p>	
	<b>Answer the following questions:</b>	
66.	<p>We are told to worship photos and idols of Gods during our _____.</p> <p>(a) childhood                      (b) adulthood</p> <p>(c) growing up years              (d) none of these</p>	
67.	<p>Parents should be worshiped because _____</p> <p>(a) they gave us Holy books to read</p> <p>(b) they taught us what is good and what is bad</p> <p>(c) they work hard to make our lives easier</p> <p>(d) they have read many mythical stories</p>	
68.	<p>The natural disaster that has not been talked about in the passage is:</p> <p>(a) Drought                              (b) Earthquake</p> <p>(c) Flood                                      (d) Landslide</p>	
69.	<p>A river teaches us to be _____</p> <p>(a) Stubborn                              (b) Obstinate</p> <p>(c) Progressive                              (d) Docile</p>	

