20E(A)

GENERAL SCIENCE, Paper - II

(Biological Science)
(English version)
Parts A and B

Time: 2 hrs. 45 min.]

[Maximum Marks: 40

Instructions:

- 1. Part-'A' consist of three Sections. Answer the questions under Part-'A' on a separate answer book.
- 2. Write the answers to the questions under Part 'B' on the question paper itself and attach to the answer book of Part 'A'.
- 3. 15 minutes is allotted to read the question paper. 2.30 hours is allocated to write answers.

Part - A

Time: 2 hrs.

Marks: 30

SECTION - I

NOTE: (i) Answer the following questions.

 $4 \times 1 = 4$

- (ii) Each question carries ONE mark.
- 1. Which disease occurs is child when there is an immediate second pregnancy or repeated child births in a mother?
- 2. What happens if blood platelets are absent in blood?
- 3. What questions you ask the doctor, who visited your school on World AIDS day?
- 4. Suggest any two practices suitable to farmer with less water resources.

P.T.O.

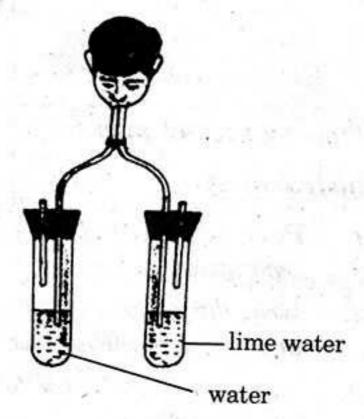
20E(A)/New

SECTION - II

NOTE: (i) Answer the following questions.

 $5 \times 2 = 10$

- (ii) Each question carries TWO marks.
- 5. (a) Which gas turns lime water milky in this experiment?
 - (b) Which gas do you think might be present in less quantities in the air we breath out as compared to air around us?



- 6. After reading the functions of lymphatic system, what precautions you would suggest to your elders about Edema?
- 7. What habits you would like to follow for the proper functioning of kidneys?
- 8. It is believed that the Diencephalon in fore-brain and vagus nerve (10th cranial nerve) plays an important role in carrying hunger signals to the brain. Hunger pangs continue upto 30-45 minutes. Increase in ghrelin levels results in sensation of hunger and motivation to consume food.

Read above content and prepare any two questions.

9. Explain the role of green house gases in Global Warming.

SECTION - III

NOTE: (i) Answer the following questions.

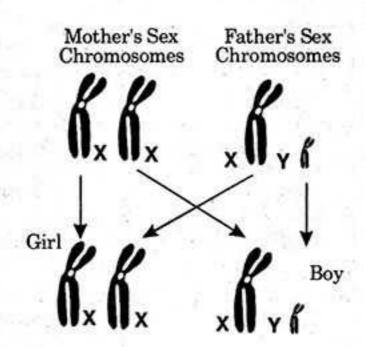
 $4 \times 4 = 16$

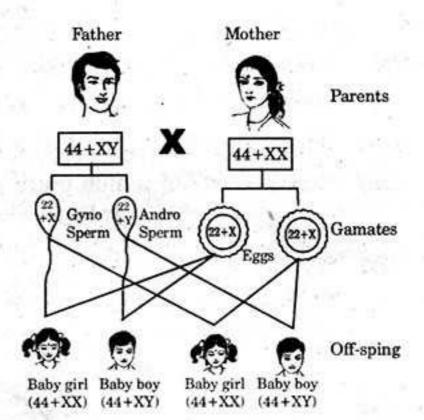
- (ii) Each question carries FOUR marks.
- (iii) There is internal choice for each question.
- 10. (A) During Photosynthesis, several events occurs in the Chloroplast. Explain the light dependent reactions.

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NA

- (B) (i) What does the given flow chart indicate?
 - (ii) What will happen if the sperm containing 'X' chromosomes fertilises the ovum?
 - (iii) Who decides the sex of the baby-Mother or Father?
 - (iv) How many pairs of chromosomes are present in off-spring?





- 11. (A) (i) What change did you observe in the thermometer in the given experiment?
 - (ii) Where does the heat come from?
 - (iii) What result you will get, if you perform this experiment with dry seeds?
 - (iv) What are the apparatus used in this experiment?



OR

- (B) (i) Explain the procedure followed in the experiment conducted to understand the action of saliva on starch.
 - (ii) What apparatus and chemicals are used to do this experiment?

P.T.O.

12. (A) Analyse the following information and answer the questions.

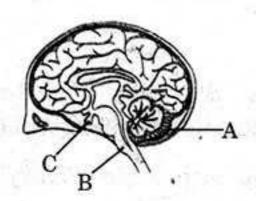
Alkaloid	Part of the plant	Uses
Quinine	Bark	Anti-malarial drug
Pyrethroids	Leaves	Insecticide
Reserpine	Roots	Medicine for snake bite
Caffeine	Seeds	Central nervous system stimulant
Nimbin	Seeds, Barks, Leaves	Antiseptic

- (i) Name the alkaloid which is used to cure malaria.
- (ii) Name the alkaloids used as insecticides.
- (iii) Which system is stimulated by the alkaloid caffeine?
- (iv) Which parts of which plant is used as medicine for snake bite?

OR

(B) Should we use pesticides as they prevent our crop and food from pests or should we think of alternatives? Write your view about this issue and give sound reason for your answer.

13. (A)



- (i) This diagram belongs to which system of the body?
- (ii) Name the parts A and B.
- (iii) The part 'C' is endocrinal gland. This is called master gland. What is the name of this gland?
- (iv) Which part in this diagram is useful to solve problems and puzzles?

OR

- (B) (i) Draw a neat labelled diagram of L.S. of flower.
 - (ii) What are the sexual parts in the flower?

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MARCH, 2017

NA

20E(B)

GENERAL SCIENCE, Paper-II

(Biological Science) (English version)

Parts A and B

Tin	ne : 2 hrs. 45 min.]		[Maximum Marks: 40
Ins	tructions:		
1.	Answer all the questions.		
2.	Each question carries 1/2 mark		
3.	Marks will not be awarded in answers.	any case of over	-writing, rewritten or erased
4.	Write the CAPITAL LETTER following questions in the brace		
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Tin	ie : 30 minutes		Marks: 10
	<u>SE</u>	CTION - IV	
NO	TE: (i) Answer all the c	uestions.	1 - Oct. 1977 1287 197
	(ii) Each question c		
	(iii) Answer should l	e written on que	stion paper itself.
	Put correct answer in the brack	ets given below.	20×½=10 marks
14.	Pepsin : Proteins :: Lipase :		Section and the second
	(A) Carbohydrates	(B) Fats	entre Gladel in Pr
	(C) Vitamins	(D) Sucrose	
15.	C ₆ H ₁₂ O ₆ + 6O ₂	+ 6H ₂ O +	energy []
8	(A) 6CO ₂	(B) $C_6H_{12}O_6$	
	(C) 6O ₂	(D) 12CO ₂	Trunktaurus (Some
10			
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	 Haemoglobin has iron while 1 is correct, 2 is wrong. 		
	(C) 1, 2 both are correct.		
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- 1	(C)	0.4	(D)	0.04	Aug.			
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	(C)	Vein		,D)	Widscular IID		1		
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	(b)	Blood pressure			ermometer				
	(c)	Amoeba		- Carlot	wnian moven	nent	W 1		
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	(A) reduce photosynthesis	(B) regulate it's growth	3/11/ L
	(C) releasing phytohormor	nes. (D) protect from grazers.	S &
24	. Name the part 'X' in the give	ven diagram	
	(A) Acrosome	X	na des
	(B) Head		137
Ages	(C) Nucleus	The state of the s	
10	(D) Tail	6	West of
	(D) Tall	. 5	
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25.	In which organisms, budding (A) Yeast]
	(C) Earthworm	(B) Paramoecium (D) Amoeba	
*			
26.	When your stomach is full ar	nd there is no need of food anymore,	
	a normone is secreted that si	appresses hunger. Name the hormone.	T 1
	(A) Girein	(B) Vasopressin	S 8 8 8
	(C) Leptin	(D) Insulin	2
27.	Man arginine	(D) Insulin	21.
27.	Find out the missing thing fr	(D) Insulin om the table.	[]
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	Bisexual flowers.	- 38			
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Which	of the following statement	for his	experiment?	1]
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