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

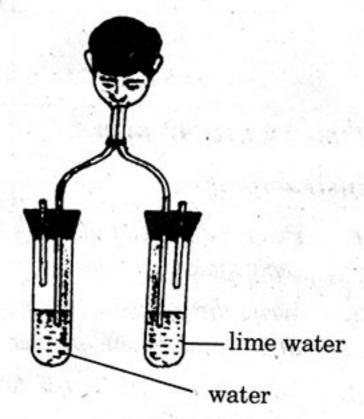
NA

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.

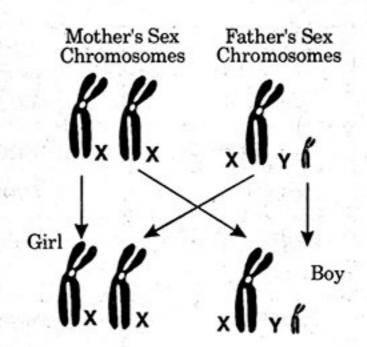
 $4 \times 4 = 16$

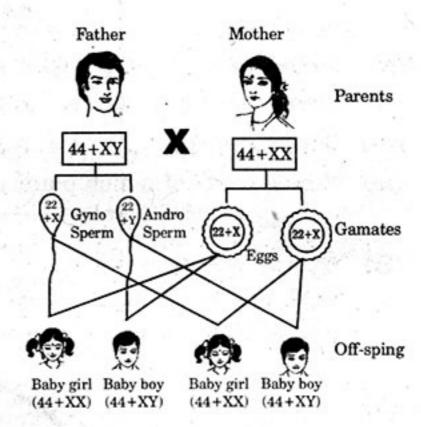
- (ii) Each question carries FOUR marks.
- (iii) There is internal choice for each question.
- 10. (A) During Photosynthesis, several events occurs in the Chloroplast. Explain the light dependent reactions.

20E(A)/New

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.

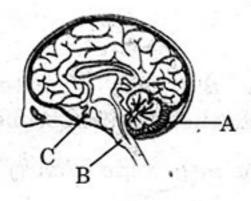
Alkaloid	Part of the plant	Uses
Quinine	Bark	Anti-malarial drug
Pyrethroids	Leaves	Insecticide
Reserpine	Roots	Medicine for snake bite
Caffeine	Seeds	Central nervous system stimulant
Nimbin	Seeds, Barks, Leaves	Antiseptic

- (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?

20E(A)

MARCH, 2017

NA

20E(B)

GENERAL SCIENCE, Paper-II

(Biological Science) (English version)

Parts A and B

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Ins	tructions:	9 . 8		
1.	Answer all the questions.			1. 1
2.	Each question carries ½ mark.			nieri in de
3.	Marks will not be awarded in answers.	any c	ase of over-writing, re	written or erased
4.	Write the CAPITAL LETTER (A following questions in the brack			ect answer for the
	Paper a sum of the second seco	art	- B	econica (a) Elefateleción Elefateleción
Tim	ie: 30 minutes		10.00	Marks: 10
	SEC	CTIO	N - IV	
NO'	TE: (i) Answer all the quality (ii) Each question can (iii) Answer should be	rries 1		itself.
tr. di	Put correct answer in the bracke	ets giv	en below.	20×1/2=10 marks
14.	Pepsin : Proteins :: Lipase :		in Total State on a	ing Ar 1
	(A) Carbohydrates	(B)	Fats	
	(C) Vitamins	(D)	Sucrose	
15.	C ₆ H ₁₂ O ₆ + 6O ₂		+ 6H ₂ O + energy	1 1
	(A) 6CO ₂	(B)	$C_6H_{12}O_6$	riseful. Lan
	(C) 6O ₂	(D)	12CO ₂	10a.0 - (Cac)
16.	 Chlorophyll is similar to the Haemoglobin has iron while 		• · · · · · · · · · · · · · · · · · · ·	[1
	(A) 1 is correct, 2 is wrong.			
	(C) 1, 2 both are correct.		1, 2 both are wrong.	00.
20E	(B)/New			P.T.O.

	The perce	entage of Carbo	on di oxide in	exhaled air is		L	1
1 10	(A) 44			4.4			
	(C) 0.4	T. volum	(D)	0.04	Magaria .		
8.	The give	n blood vessel c	arries blood f	rom body part	s to heart.		
		e blood vessel.	the second that	turia	A STATE OF THE STA	[]
	(a)			Mary 2			
	yawki din				s 46 reist	AH S. one	
					100	Englisher.	
	(4) 4-4		(B)	Capillary	e 1919 ada Ma	Venilla de la companya della companya della companya de la companya de la companya della company	
	(A) Arto			Muscular fib	re	on and a	
	(C) Veir	u .	(D)	Wascara II	od ron Mer		
9.	Study th	e following pair	rs.			1]
	(a) Ster	thoscope	- Re	ne Laennec	UK 695 JAK		
	(b) Blo	od pressure	- Th	ermometer			
*****		oeba		ownian mover	nent		
	Identify i	the mis-matche	the state of the s	S	Solo of the	1	
	(A) a		(B)				
9	(C) c		(D)	None		as WE have	1
20.	Glomer		Fubular absorption	?		rmation of ertonic urin	e
	Intua	ion lica	bsorption	La de Libraria]	A1013 (4.73	
	Section 1				ration.		
	(A) Tul	bular secretion.	. (B)	Tubular filt			
		bular secretion bular excretion				vita	
		The state of the s					
21.	(C) Tul	The state of the s	. (D)	Urine forma	tion.	am I ? []
21.	(C) Tul	bular excretion	. (D)	Urine forma	tion. -fuel. Who	am I? []
21.	(C) Tul	bular excretion lant. My seeds a	(D) are used for pro	Urine forma oduction of bio Neem plant	tion. -fuel. Who	am I? []
	(C) Tul I am a pl (A) Ru (C) Cac	bular excretion lant. My seeds a bber plant ctus plant	re used for pro (B) (D)	Urine formated oduction of bio Neem plant Jatropa plan	tion. -fuel. Who	am I ? []
	(C) Tull I am a pl (A) Rul (C) Cac	bular excretion lant. My seeds a bber plant ctus plant retory organs in	nre used for pro (B) (D) n phylum Mol	Urine formated duction of bio Neem plant Jatropa plant lusca is	tion. -fuel. Who a	am I ? []
	(C) Tule I am a ple (A) Rule (C) Cac The excent (A) Res	bular excretion lant. My seeds a bber plant ctus plant retory organs in	nre used for pro (B) (D) n phylum Mol (B)	Urine formated duction of bio Neem plant Jatropa plant lusca is	tion. -fuel. Who a	am I ? []
	(C) Tule I am a ple (A) Rule (C) Cac The excent (A) Res	bular excretion lant. My seeds a bber plant ctus plant retory organs in	nre used for pro (B) (D) n phylum Mol (B)	Urine formated duction of bio Neem plant Jatropa plant lusca is	tion. -fuel. Who a	am I? []
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21. 22.	(C) Tull I am a pl (A) Rul (C) Cac The exci (A) Rei (C) Me	bular excretion lant. My seeds a bber plant ctus plant retory organs in	nre used for pro (B) (D) n phylum Mol (B)	Urine formated duction of bio Neem plant Jatropa plant lusca is	tion. -fuel. Who a	am I ? []

23.	Leaf movement in mimosa h	elps to	r	
	(A) reduce photosynthesis.	(B) regulate it's growth.	pilit	S of
(C) releasing phytohormone	es. (D) protect from grazers.	y sike	
	A State of the sta			
24. N	Name the part 'X' in the give	en diagram.	1	1
(,	A) Acrosome		2000	
()	B) Head			
((C) Nucleus	is the collaboration of the same and the same and		
(1	D) Tail	5	tula i	
		. 5		
05 7		BANTON TOTAL CONTRACTOR		2.5
25. In (A	which organisms, budding (A) Yeast	가게 하면서 보면 하면 가득하다 하는 것이 되는데 그런 사람이 모르겠다. 그리면 살아 나를 보는 그것이	[]
(C		(B) Paramoecium		
		(D) Amoeba		
26. W	hen your stomach is full and	there is no need of food anymore,		
		or rood allylliole.		
a .	normone is secreted that sur	opresses hunger. Name the hormone.	ſ	1
(A	.) Ghrelin	opresses hunger. Name the hormone. (B) Vasopressin	[]
a .	.) Ghrelin	opresses hunger. Name the hormone.	[]
(A (C	Ormone is secreted that sup Office of the control	opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin	[]
(A (C	normone is secreted that sup One of the control of	opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table.]]
(A (C	Office of pyramid	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base]]
(A (C	Type of pyramid Pyramid of number	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism]]
(A (C	Office of pyramid	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base	[]
(A) (A) (A) (A) (A)	Office of pyramid Pyramid of number Ecological pyramid.	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy]]
(A) (C) 27. Fin	Office of pyramid Pyramid of number Ecological pyramid.	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy	[]
(A) (C) (A) (A) (C)	Chrelin Chreli	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy (B) Pyramid of energy.	[]
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(A) (C) 27. Fin (A) (C) 28. Ma 1. 2.	Chrelin Chreli	Opresses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy (B) Pyramid of energy. (D) Giza pyramid. a. Father of genetics. b. Natural selection. c. Double helix.	[]
(A) (C) 27. Fin (A) (C) 28. Ma 1. 2. 3.	Type of pyramid Pyramid of number Ecological pyramid. Pyramid of bio-mass. tch the following. DNA Mendel Darwin 1-a, 2-b, 3-c	presses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy (B) Pyramid of energy. (D) Giza pyramid. a. Father of genetics. b. Natural selection. c. Double helix. (B) 1-b, 2-c, 3-a	[]
(A) (C) 27. Fin (A) (C) 28. Ma 1. 2. 3. (A) (C) 20E(B)/N	Chrelin Chreli	presses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy (B) Pyramid of energy. (D) Giza pyramid. a. Father of genetics. b. Natural selection. c. Double helix. (B) 1-b, 2-c, 3-a	[]
(A) (C) 27. Fin (A) (C) 28. Ma 1. 2. 3. (A) (C) (C)	Chrelin Chreli	presses hunger. Name the hormone. (B) Vasopressin (D) Insulin m the table. Base Number of organism Flow of energy (B) Pyramid of energy. (D) Giza pyramid. a. Father of genetics. b. Natural selection. c. Double helix. (B) 1-b, 2-c, 3-a	[]] o.

29.	Which	of the following statements is NOT true about the el's selection of garden pea for his experiment?	[]
	Mend (A)	Well defined characters.		
	(B)	Bisexual flowers.		
	(C)	Predominantly self fertilisation.		
		Cheap in cost.		- y
	1 70		12.5	14
30.	The	ruel campaign against which bird is initiated in 1958 in China	?[]
50.		Parrots (B) Sparrows	7	
	(C)	Crows (D) Vultures		
			г	1
31.	This	symbol denotes that		2.5
			1	
			- 3	
				2 2
	(A)	UNDP (B) Percolation pits		
	(C)	Sustainable development (D) Recycling logo	30	
		A second	Г	1
32.	Ban	all pesticides, this means that	31	No.
	(A)	Promote eco-friendly agricultural practices.		
	(B)	Prevention of pesticides.	unit .	
	(C)	Control on usage of pesticides.		
	(D)	Stop bio-chemical factories.		
			ſ	- 1
33	. Wh	ich of the following statement is true?	٠.	
		(a) Development is necessary.		
		(b) Development should be eco-friendly.		
	(A)	그 맛있는 게임하게 하게 하게 취약하게 되게 하셨다면서 하게 하게 되었다. 그는 이 사람들은 사람들은 사람들이 되는 것이 되었다. 그는 그 사람들이 아니라 아니라 다른 사람들이다.		
	And the second s	'a' false, 'b' true	100	
	(B)	HE - THURS IN MEDICAL TO BE SHOWN TO THE SECOND FOR THE SECOND TO SECOND FOR THE	7	
	(B) (C)	both a , b are false.		
		both a , b are false.		
	(C) (D)	both a , b are false. both a , b are true.	RCH.	2017
	(C)	both a , b are false. both a , b are true.	RCH,	2017