		2015 (A) Roll No: _	
		<u>SUBJECTIVE</u> MAXIMU	LOWED: 3.10 Hours JM MARKS: 83
NO		Write same question number and its part number on answer book,	
	i	as given in the question paper. SECTION-I	
2.		Attempt any Eight parts.	$8 \times 2 = 16$
_,	(i) (ii)	Define Glomerular Filtrate. What are Heat-Shock Proteins?	V 2 10
	(iii) (iv)	Define Painting with one example. What is Rigor Mortis?	
	(v) (vi) (vii)	How muscle fatigue is produced? Differentiate between Tendon and Ligament. Define Geronotology.	
	(viii) (ix)	What is Blastoderm? Differentiate between Apoptosis and Necrosis.	
	(x) (xi)	Define Metastasis. Define Theory of Special Creation.	
3.	(xii)	What do you know about Hydrothermal Vent? Attempt any Eight parts.	$8 \times 2 = 16$
	(i) (ii)	What are Neurotransmitters? Give two examples. Define Neuroglia with its function.	
	(iii) (iv)	What are Pacinian Corpuscles? What is After birth?	
	(v) (vi)	Define Diploid Parthenogenesis with example. Define Fruit set.	
	(vii) (viii)	What is Probe? Write two uses of PCR.	
	(ix) (x)	Differentiate between Phytoplankton and Zooplankton. Write two adaptations for terrestrial ecosystem.	
	(xi) (xii)	Differentiate between health and disease. What are industrial effluents?	
4.	(i)	Attempt any Six parts. Differentiate between Euchromatin and Heterochromatin.	$6\times 2=12$
	(ii) (iii)	What is Phosphodiester Bond? Differentiate between Template and Coding Strand.	
	(iv) (v) (vi)	Define Linkage. Differentiate between Sex Chromosomes and Autosomes. What is Sex Limited Trait?	
	(vii) (viii)	Differentiate between Primary and Secondary Succession. What are decomposers?	
	(ix)	Define grazing.	
		SECTION-II	
		Attempt any three questions.	$8\times 3=24$
5.(a	-	plain Urinary System of Human.	4
(t	,	ite note on Greenhouse Effect. scribe Ultrastructure of Myofilament of skeletal muscle.	4 4
6.(a		plain the evidence of evolution from Embryology.	4
7.(a		rite down detailed note on Adrenals.	4
	/	ive an account of Nitrogen Cycle.	4
(t	-	eplain the process of Cloning. Give its uses and advantages.	4
8.(a (b		rite a note on Genetic Code.	4
	/	rite a note on Growth Correlations.	4
9.(a	/	efine Epistasis and explain it with Bombay Phenotype.	4
, ,	, 20	SECTION-III (PRACTICAL)	•
10.		Attempt any three parts.	
(.		Make a sketch and label the male reproductive system of frog.	5
(/	Make the labelled diagram of hind limb of frog.	5 5 s. 5
		Write an experiment to demonstrate the phenomenon of Geotropism in plant	
(D) '	Write an experiment to observe the telophase stage of mitosis in a dividing c	ell. 5

Write short answers of the following:
(i) Define Autecology.

(ii) What are biotic components of an ecosystem?

(iii) Define Cell Cycle.

(iv) Which type of muscles are present in the walls of heart?

(v) What is Sarcomere?

(E)