Optional Paper: Life Sciences



XI M.Sc. (Wildlife Science) National Entrance Test

8th April, 2007

Time: 2 Hours Max Marks: 100

1. This paper consists of the following four sections. Candidates should answer all the sections:

Section	Subject	Max. Marks	Time Allotted
I	General Knowledge	10	
II	General Science	20	
III	Optional Paper (Life Science/Forestr Agricultural Sciences Veterinary Science)		2 Hours
IV	Essays	40	

- 2. Sections I, II, & IV are common for all candidates. In the Optional Paper (Section III), candidates are required to answer questions on any one of the subject opted by them. The subjects are: Life Sciences, Forestry, Agricultural Science and Veterinary Science.
- 3. Candidates should first answer the objective type questions (Section I, II & III) on the question paper itself and return it to the Invigilator. All questions in section I, II, & III carry equal marks. In Section IV candidates are required to attempt any 2 essays carrying equal marks. Two separate answer books will be provided for essays (Section IV).
- 4. For the multiple choice objective type questions (Section I, II & III), write the alphabets in capital representing the correct answer in the blank bracket provide on the right hand side. No marks will be awarded for more than one answer and overwriting. Candidates can change answer by simple cutting.
- 5. Write your Name and Roll Number where indicated.
- 6. Maintain strict silence during the examination.

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Section III: Optional Subject – Life Sciences

Max. Marks: 30

1.	Thre	Three important proteins in blood are				
	A B	Collagen, Fibrinogen, and Hemoglobin Keratin, Fibrinogen and Hemoglobin				
	C	Albumin, Fibrinogen and Hemoglobin				
	D	Albumin, Keratin and Hemoglobin	[]		
	D	Modifini, Retain and Hemogroom	L	J		
2.	A fra	agment of a chromosome without a centromere is called:				
	A	Acrocentric				
	В	Acentric				
	\mathbf{C}	Telocentric				
	D	Iso centric	[]		
3. A DNA segment which is capable of changing its location within a chron between chromosomes.			om	osome or		
	A	Cistron				
	В	Muton				
	C	Recon				
	D	None of the above	[]		
4.	Carc	inoma is a tumor arising from:				
	A	Endodermal or mesodermal tissues				
	В	Ectodermal or connective tissues				
	C	Endodermal or ecodermal tissues				
	D	Ectodermal or supporting tissues	[]		
5	Whic	ch of the following is the most sensitive assay for antibody detection?)			
	A	Immunoelectrophoresis				
	В	Agglutination				
	\mathbf{C}	Gelelectrophoresis				
	D	ELISA	[]		

6.	The V	The Vector for Dengue fever is:					
	A	Anopheles gambiae					
	В	Aedes aegypti					
	C	Anopheles culicifacies					
	D	Culex pipiens	[]			
		F. F	L	J			
7.		n one of the following method is used to screen the protein of	express	ion gene			
	library	y using double standard DNA as a probe?					
	A	Southern blotting					
	В	Northern blotting					
	C	Western blotting					
	D	South-Western blotting	[]			
8.	Pore s	size of membranes used for tissue culture media sterilization is:					
	A	0.85 μm					
	В	0.45 µm					
	C	0.085 μm					
	D	0.045 µm	[]			
		-P-1712 1					
9.	Protei	n part of enzyme is called:					
	A	Prosthetic group					
	В	Apoenzyme					
	C	Holoenzyme					
	D	All of these	[]			
10.	Leech	es come in the Phylum					
	A	Platyhelminthes					
	В	Arthropoda					
	C	Annelida					
	D	Progonophora	[]			
11.	Most	marsupials live in					
	A	Australia					
	В	Asia					
	C	America					
	D	Galapagos Island	[]			
12.	A hor	mone that controls closure of stomata to open					
	A	Abscicic acid					
	В	Gibberellins					
	C	Auxins					
	D	Cytokinins	Г	1			

13.	Hon	Homoeostasis occurs in					
	A	All organisms to some extent					
	В	Multi cellular organisms					
	C	Animals body					
	D	Birds and Mammals only		[]		
14	An erythrocyte lives for approximately						
	A	one week					
	В	one month					
	C	three months					
	D	one year		[]		
15	Gastric juice has pH of about						
	A	1					
	В	2					
	C	6					
	D	10		[]		
16	Whi	Which of the following is upright in all the ecosystems?					
	A	Pyramid of number					
	В	Pyramid of energy					
	\mathbf{C}	Pyramid of biomass					
	D	All of above		[]		
17	An a	An abnormal gene is replaced by a normal gene. It is called-					
	A	Gene therapy					
	В	Cloning					
	C	Mutation					
	D	Gene Cloning		[]		
18	A po	A population is a group -					
	A	Species in a community					
	В	Communities in an ecosystem					
	C	Individuals in a species					
	D	Individuals in a family		[]		
19	The	geographic limits within which a population exists is its					
	A	Niche					
	В	Habitat					
	C	Range					
	D	Territory		[1		
		•		-	-		

20.	Mos	Most primary productivity in the surface waters of lakes and oceans is by				
	A	Floating Plants				
	В	Red and Brown algae				
	C	Zoo plankton				
	D	Phyto plankton	[]		
21	"Cor	ngress Grass" is				
	A	Cynolon dactylon				
	В	Digitaria purpuria				
	C	Cymbopogen ciliatus				
	D	Parthenium hysterophorus	[]		
22.	Whi	ch of the following is endemic to the Western Himalayas?				
	A	Pinus roxburghii				
	В	Cedrus deodera				
	C	Pinus khasya				
	D	None of the above	[]		
23	Whi	ch one of the following is not a climax species?				
	A	Shorea robusta				
	В	Tectona grandis				
	C	Pinus roxburghii				
	D	Acacia catechu	[]		
24.	Whi	ch hormone is not translocated?				
	A	Auxin				
	В	Gibberlin				
	C	ABA				
	D	Cytokinin	[]		
25.	Whi	ch of these is a true nut?				
	A	Walnut				
	В	Areca nut				
	C	Cashew nut				
	D	Ground nut	[]		
26	Gern	mination inhibition due to under-developed embryo means:				
	A	Physical dormancy				
	В	Physiological dormancy				
	C	Morphological dormancy				
	D	Embryo dormancy	[]		
		•	-	_		

27 Evergreen species means:				
	A	Which does not shed leaves throughout its life cycle		
	В	Which sheds its leaves during winter		
	C	Which sheds its leaves during summer		
	D	In which there is continuous shedding of leaves		
		simultaneously with formation of new leaves	[]
28	Moso	chus moschiferus is the scientific name of:		
	A	Spotted deer		
	В	Musk deer		
	C	Barking deer		
	D]
29	India	an subcontinent falls in which of the following zoogeographic region?		
	A	Palaearctic		
	В	Oriental		
	C	Nearctic		
	D	Neotropical	[]
30	Seve	re freezing after mild winters often distort xylem elements and produc	es:	
	A	False rings		
	В	Frost rings		
	C	Normal rings		
	D		[]
