GOVT REWATI RAMAN MISHRA P.G. COLLEGE, SURAJPUR C.G.

PRACTICAL EXAM DEC-2021 (SESSION -2021-2022)

M.Sc. first semester ZOOLOGY

TI	ME:05 Hrs.	MAXIMUM	MARKS -100
	1 Based on paper ZOO101		20
_	Write down the procedure for genomic DNA isolation fr	om E. coli and its quar	tification.
в.	Write down the procedure for PCR amplification and ele ne sequence.	X .	
Q.	2 Based on paper ZOO102		20
	To determine the hydrogen ion concentration (pH) of given ter.	ven soil and water sam	ples using pH
В.	To study the insect diversity of soil at Govt. RRM PG co	ollege campus.	
C.	To Study the food chain assessment in artificially simula	nted pond ecosystem in	glass aquaria.
Q.	Based on paper ZOO103	p.k	20
A.	Write about the web-based tools used for sequence search	ches and homology scr	eening
В.	write about the databases available for Nucleic acid and	protein sequences	
	Write down the protocol for construction of phylogeneti EGA_64 software.	c tree for DNA sequen	ices using
Q.	4 Write 2-5 comments on given spots (SPOTTING).		$2 \times 10 = 20$
	1. pH electrode	6. Hydrosere	
	2. Southern Blotting	7. MS Excel	
	3.BLAST	8. Microarray	
	4. SCOPUS	9. Internet	
	5.GPS	10. Web address	
Q.5	Sessional and Record		10
Q.6	Viva- Voce	•	10
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M.Sc. first semester ZOOLOGY

M.Sc. first semester ZOOLOGY		
TIME:05 Hrs.	MAXIMUM MARKS -100	
Q.1 Based on paper ZOO101	20	
A. Write down the procedure for genomic DNA isola	tion from E. coli and its quantification.	
B. Write down the procedure for PCR amplification a gene sequence.	and electrophoretic separation of 16s rRNA	
Q.2 Based on paper ZOO102	20	
A. To determine the hydrogen ion concentration (pH meter.) of given soil and water samples using pH	
B. To study the insect diversity of soil at Govt. RRM	PG college campus.	
C. To Study the food chain assessment in artificially simulated pond ecosystem in glass aquaria.		
Q.3 Based on paper ZOO103	20	
A. Write about the web-based tools used for sequence searches and homology screening		
B. write about the databases available for Nucleic acid and protein sequences		
C. Write down the protocol for construction of phylomEGA_64 software.	ogenetic tree for DNA sequences using	
Q.4 Write 2-5 comments on given spots (SPOTTIN	G). $2 \times 10 = 20$	
1. pH electrode	6. Hydrosere	
2. Southern Blotting	7. MS Excel	
3.BLAST	8. Microarray	
4. SCOPUS	9. Internet	
5.GPS	10. Web address	
Q.5 Sessional and Record	10	

10

Q.6 Viva- Voce

GOVT REWATI RAMAN MISHRA P.G. COLLEGE, SURAJPUR (C.G.) CCA-III EXAM DEC-2021 (SESSION -2021-2022)

M.Sc. first semester ZOOLOGY PAPER-I (ZOO101)

DATE: 02-03-2022		MA	XIMUM MARKS -20
Q.1 Fill in the blanks & ob	jective questions.		1 X 5 = 5
1. Theory of germplasm was	given by	5-3r	
2. Life originated in	Era.	٥°	
3. DNA is also present in wheel (a) Golgi Body		(c) Mitochondria	(d) Cell wall
4. Study of improvement of (a) Eugenics	human race by means (b) Euthenics	of principles of genetics (c) Euphonic	s is called- (d) Genetics
5. Characteristics which was (a) Binocular vision	not in the direction of (b) Browridges	f evolution of man is- (c) Shortening of jaw	(d) Prehensil tail
Q.2 Short answer type que	stion Any one	e	. 05
 Explain in details that life Or Explain diversification in 	4.45/19		न्त्राच्याम् क्रिस्ट स्टब्स्ट
Q.3 Long answer type que	stionAny o	one	10
1. What is the evolution. Ex	plain it with different of	experiments.	
	Or		
2. Describe the mechanism	of origin of species.		

GOVT REWATI RAMAN MISHRA P.G. COLLEGE, SURAJPUR (C.G.) CCA-III EXAM DEC-2021 (SESSION -2021-2022)

M.Sc. first semester ZOOLOGY PAPER-I (ZOO101)

	DATE: 02-03-2022	MAXIMUM MARKS -20
	Q.1 Fill in the blanks & objective questions.	$1 \times 5 = 5$
	1. Theory of germplasm was given by	
		amaly streetled to the street state of
		HEL MAD
The state of the s	4. Study of improvement of human race by means of principles of g (a) Eugenics (b) Euthenics (c) Euphonic	enetics is called— (d) Genetics
The state of the s	5. Characteristics which was not in the direction of evolution of material (a) Binocular vision (b) Brownidges (c) Shortening	
The same of the last	Q.2 Short answer type questionAny one READSHITAHHOLD	Wormad MARGWI 05
	1. Explain in details that life originated from RNA. Or the gentlement of the state of the stat	e maneri Address Co morellaros fatress CANDHRARA KRISHNA CANDHRARA KRISHNA
	2. Explain diversification in biodiversity.	eviaus Education Detail
01	Q.3 Long answer type questionAny one	10 Equition 10
	Or Or	สวบายว่า

on or other of the vinestation and a of all years here of the vious exam. (10th, 12th, 15th, upline Post-Squittion Diplomatis of the cases

ी प्रसाणित ब्यासक्तरती हूँ कि मेरे तुवार आवेदम पत्र से दी गई जानण ही गई। है। विद्यानी ही सामाणी अभत्य पाई वार्क है हो भा तुन िराज कर दिया

Phatocity of Demote Certificial saided by the competent Authority.

and Signature of College

Photocopy of Caste Cert. (If polyings from SC/ TIOBC) toward by the computer that hathority of C.G.

2. Describe the mechanism of origin of species.

GOVT REWATI RAMAN MISHRA P.G. COLLEGE, SURAJPUR (C.G.) CCA-III EXAM DEC-2021 (SESSION -2021-2022)

M.Sc. first semester ZOOLOGY PAPER-II (ZOO102)

DATE: 02-03-2022	MAXIMUM MARKS -20
Q.1 Fill in the blanks & objective questions.	1 X 5 = 5
1. Pond is an example of	
2. Father of biodiversity is	
3. Which of the following is the most stable ecosystem— (a) Desert (b) Forest (c) Ocean	(d) Mountain
4. A thin layer of ozone is present in- (a) Troposphere (b) Stratosphere (c) Stratopause	e (d) Mesosphere
5. Which of this is an in-situ method of conservation: (a) National park (b) Botanical garden (c) Tissue cult	ure (d) Genetic engineering
Q.2 Short answer type question Any one	05
. Describe phytogeography	
Or . What do you mean by global warming.	
2.3 Long answer type questionAny one	131 Will 10
. Discuss bioremediation of chemical in detail.	
Or	
. Write an essay on environmental stresses and their manag	gement.

Govt. Rewati Raman Mishra PG College Surajpur (C.G.)

Botany B.Sc-III Practical Exam 2021-22

Maximum n	marks - 50	Date 12-04-2022	Time: -10 AM
Attempt a	all Question (सभी	प्रश्नों को हल करना अनिवार्य है।)	
Question 1	1. Black rust dise	ase का वर्णन कीजिए।	10 marks
	Discribe the Bla	ack rust disease.	
Question 2	2. नम उष्मीय निर्जमी	करण के लिए Autoclave का वर्णन कीजिए।	05 marks
	Discribe Autocl	ave moist heat sterilization.	
Question 3	3. जीवाणुओं के grar	m's staining का वर्णन कीजिए।	05 marks
	Discribe the gra	am's staining for Bacteria.	
Question 4	4. कैलस कल्चर क	ा वर्णन कीजिए।	05 marks
	Discribe the ca	llus culture.	
Question 5	5 . Spotting		10 marks
	Write 2 to 5 cor	mments 1 to 5 spots	To marke
	1- Hot air oven		
	2- Culture medi	ia	
	3- white rust		
	4- PH meter		
	5- Compound n	nicroscope	
(6)	Project work		05 marks
(7)	Viva		05 marks
(8)	Sessional		05 marks