

Test Booklet No. _____

This booklet consists of 100 questions and 20 printed pages.

RGUCET/2024/___/___

Series

NIL

**RGUCET 2024
Common Entrance Test, 2024**

MASTER OF SCIENCE (ZOOLOGY)

Full Marks: 100

Time: 2 Hours

Roll No.

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Day and Date of Examination: _____

Signature of Invigilator(s) _____

Signature of Candidate _____

General Instructions:

PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 100 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall after the commencement of the entrance test or leave the examination hall within one hour thirty minutes.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidates are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy.

1	1, 8, 27, 64, 125, 216.. , what next ?				Answer option
	a) 256	b) 343	c) 365	d) 400	b) 343
2	What percentage of 180.50 is 36.1?				Answer option
	a) 20	b) 25	c) 20.5	d) None of these	a) 20
3	The average age of 30 boys in a class is 15 years. If the age of teacher is also included, the news average age becomes 16 years. What is the age of teacher?				Answer option
	a) 35 years	b) 46 years	c) 30 years	d) 55 years	b) 46 years
4	If A, B and C are three sets such that $A \cap B = A \cap C$ and $A \cup B = A \cup C$. Then				Answer option
	a) $A = B$	b) $A = C$	c) $B = C$	d) $A \cap B = C$	c) $B = C$
5	The number of arbitrary constants in the particular solution of a differential equation of third order is:				Answer option
	a) 3	b) 2	c) 1	d) 0	d) 0
6	Change in voice: "Who is creating this mess?"				d
	a) Who has been created this mess?	b) By whom has this mess been created?	c) By whom this mess is being created?	d) By whom is this mess being created?	d) By whom is this mess being created?
7	What is the Synonym of "EMBEZZLE" ?				a
	a) Misappropriate	b) Balance	c) Remunerate	d) Clear	a) Misappropriate
8	What is the Antonym of "EXODUS"?				a
	a) Influx	b) Home-coming	c) Return	d) Restoration	a) Influx
9	Improve the sentence: "His powerful desire brought about his downfall."				b
	a) His intense desire	b) His desire for power	c) His fatal desire	d) No improvement	b) His desire for power
10	The grapes are now enough to be picked.				c
	a) Ready	b) Mature	c) Ripe	d) Advanced	c) Ripe
11	The highest civilian award in India is:				A
	A) Bharat Ratna	B) Padma Bhushan	C) Padma Vibhushan	D) Padma Shri	Bharat Ratna
12	Which national park is famous for being the last natural habitat of the Asiatic Lion?				D
	A) Kaziranga National Park	B) Ranthambore National Park	C) Jim Corbett National Park	D) Gir National Park	Gir National Park
13	Which of the following is NOT a requirement for eligibility to contest Lok Sabha elections in India?				C

	A) Must be a resident of the constituency from which he/she is contesting	B) Must have attained the age of 25 years	C) Must have a minimum educational qualification of a Bachelor's degree	D) Must be a citizen of India	Must have a minimum educational qualification of a Bachelor's degree
14	Arunachal Pradesh was established as a full-fledged state of India in which year?				D
	A) 1962	B) 1971	C) 1987	D) 1986	1986
15	The Mishmi Hills, located in Arunachal Pradesh, are known for their rich biodiversity. Which of the following animals is found in this region?				B
	A) One-horned Rhinoceros	B) Clouded Leopard	C) Asiatic Lion	D) Bengal Tiger	Clouded Leopard
16	Which of the following countries served as a model for India's semiconductor industry development?				C
	A) China	B) Japan	C) South Korea	D) United States	South Korea
17	The launching date of Viksit Bharat @2047: Voice of Youth				B
	A) 5 January, 2024	B) 11th December, 2023	C) 14 February, 2024	D) 10 November, 2023	11th December, 2023
18	What is the significance of the year 2047 in the context of Vikshit Bharat?				A
	A) It marks the centenary of India's independence	B) It signifies a major environmental milestone	C) It represents the completion of a demographic shift	D) It is the target year for achieving global sustainability goals	It marks the centenary of India's independence
19	Who were awarded the Nobel Prize in Medicine in 2023?				C
	A) David Julius and Ardem Patapoutian	B) Harvey J. Alter, Michael Houghton, and Charles M. Rice	C) Katalin Kariko and Drew Weissman	D) Emmanuelle Charpentier and Jennifer Doudna	Katalin Kariko and Drew Weissman
20	Which Indian city was declared the cleanest in India in the Swachh Survekshan 2024?				A
	A) Indore	B) Mysore	C) Surat	D) Ahmedabad	Indore
21	Choose the correct statement of the following: The sequence of hormone secretion from the beginning of menstruation				Answer option (a,b,c or d)
	a) FSH, progesterone, estrogen	b) Estrogen, progesterone, FSH	c) FSH, estrogen, progesterone	d) Estrogen, progesterone, FSH	c.FSH, estrogen, progesterone
22	Match the following cells with their secretions:				Answer option

	A. Beta cells	1. Lysozyme		(a,b,c or d)
	B. Mast cells	2. Pancreatic enzyme		
	C. Paneth cells	3. Histamine		
	D. Acinar cells	4. Insulin		
	a. A-4, B-2, C-1, D-2	b. A-3, B-2, C-4, D-1	c. A-4, B-3, C-1, D-2	d. A-2, B-3, C-1, D-4
23	Chose the Correct statement: In Drosophila sex is determined by			
	a) X and Y Chromosomes	b) . Ratio of pair of X chromosomes to the pairs of autosomes	c) . Ratio of numbers of X chromosomes to the sets of autosomes	d) Whether the egg is fertilized or developed parthenogenetically
	c) Ratio of numbers of X chromosomes to the sets of autosomes			
24	Choose the correct option: A: Assertion: The signal peptide of protein sorting is present on ER, Golgi and Lysosomes B: Justification: Because, protein sorting takes place in these cell organelles			
	a) A is false and B is true	b) B is not the reason of A	c) A is false and B is True	d) Both A and B is false
25	Find out the true statement on: Which part of ovary in mammals acts as an endocrine gland after ovulation?			
	a)Graafian follicle	b) Stroma	c)Germinal epithelium	d)Vitelline membrane
	a) Graafian follicle			
26	The hormone that regulates the growth and metamorphosis in frog is			
	a) Adrenalin	b) Insulin	c) Thyroxine	d) Cortisol
	(C) Thyroxine			
27	Match the item of column –I with those of column –II and find out the correct match from the given code. The ratio of protein to lipids in different membrane			
	a. Human erythrocyte	i. 0.85		
	b. Mouse Liver Cell	ii. 1.3		
	c. Mitochondrial inner membrane	iii. 1.1		
	d. Ameba	iv. 3.2		
	a) a-iv, b-i, c-iii, d-ii	b) a-i, b-ii, c-iv, d-iii	c) a.-iii, b-i, c-iv, d-ii	d) a-ii, b-i, c-iii, d-iv
	c) a.-iii, b-i, c-iv, d-ii			
28	Choose the correct statements: Immediately after fertilization in animals the first biochemical changes in the egg are initiated by			
	Answer option (a,b,c or d)			

	a) New gene transcription	b) The release of Ca^{2+} from the internal reservoirs	c) The initiation of DNA synthesis	d) A lowering of cytosolic pH	b) The release of Ca^{2+} from the internal reservoirs
29	Choose the correct option A: Assertion: Oxyhemoglobin formation takes place in lung and CO_2 bind with haemoglobin in peripheral tissue B: Justification: CO_2 forms in peripheral tissue in Krebs cycle				Answer option (a,b,c or d)
	a) A is correct, but B is wrong	b) Both A and B are correct	c) Both A and B are wrong	d) A is wrong, but B is correct	d) A is wrong, but B is correct
30	Find out the correct statement neuron and endocrine gland:				Answer option (a,b,c or d)
	a) Neurons regulate endocrine activity, but not <i>vice versa</i> .	b) Endocrine glands regulate neural activity and nervous system regulates endocrine glands	c) Neither hormones control neural activity nor the neurons control endocrine activity.	d) Endocrine glands regulate neural activity, but not <i>vice versa</i>	a) Neurons regulate endocrine activity, but not <i>vice versa</i> .
31	Blocking action of enzyme through blocking its active site is				Answer c
	a) Allosteric inhibition	b) Feedback inhibition	c) Competitive inhibition	d) Non-competitive inhibition	Competitive inhibition
32	Oxidative phosphorylation takes place in				Answer a
	a) Inner mitochondrial membrane	b) Outer mitochondrial membrane	c) Mitochondrial cytosol	d) Mitochondrial inter membrane space	Inner mitochondrial membrane
33	Amylase is a				Answer d
	a) Proteolytic enzyme	b) Lipolytic enzyme	c) Zymogen	d) Carbohydrate splitting enzyme	Carbohydrate splitting enzyme
34	Okazaki fragment is an element for				Answer a
	a) DNA replication	b) DNA transcription	c) cDNA synthesis	d) synthesis of genomic DNA	DNA replication
35	Active transport through plasma membrane requires				Answer b
	a) GTP	b) ATP	c) GDP	d) cAMP	ATP
36	The most abundant carbohydrate found in nature is				Answer

					c
	a) Starch	b) Glycogen	c) Cellulose	d) Chitin	Cellulose
37	The glycolysis is regulated by				Answer d
	a) Hexokinase	b) Phosphofructokinase	c) Pyruvate kinase	d) All of these	All of these
38	Which bond is present in the primary structure of protein?				Answer d
	a) Ester	b) Hydrogen	c) Ionic bond	d) Peptide	Peptide
39	The nucleoside is composed of				Answer a
	a) a base and a sugar	b) a base and a sugar and phosphate	c) a base and phosphate	d) a base	A base and a sugar
40	Isoenzymes are				Answer a
	a) Chemically, immunologically and electrophoretically different forms of an enzyme	b) Different forms of an enzyme similar in all properties	c) Catalysing different reactions	d) Having the same quaternary structures like the enzymes	Chemically, immunologically and electrophoretically different forms of an enzyme
41	Big-Bang hypothesis was proposed by				Answer option (a,b,c or d)
	a) Darwin	b) Lemaitre	c) Miller	d) Pasteur	b) Lemaitre
42	Which of the English scientists worked on origin of life and finally settled in India				Answer option (a,b,c or d)
	a) AI Oparin	b) Louis Pasteur	c) JBS Haldane	d) Archbishop Ussher	c) JBS Haldane
43	Match the following pairs:				Answer option (a,b,c or d)
	A. Collection of preserved remains of ancient organisms		I Morphology		
	B. study of physical form of organism		II. wings of insects & birds		
	C. Analogous organs		iii. Coccyx		
	D. Vestigial organs		iv. Fossil record		
	a) A-iv, B-ii, C-iii & D-i.	b) A-i, B-ii, C-iii & D-iv.	c) A-iv, B-I, C-ii & D-iii.	d) A-ii, B-iii, C-iv & D-i.	c) A-iv, B-I, C-ii & D-iii.
44	Sort out the pairs of only 'true' statements from the following: A. Cenozoic era is the 'age of mammals'. B. Human first appeared in Cretaceous period.				Answer option

	C. Homologous structure have same embryonic origin D. Virus is the connecting link between plants and animals				(a,b,c or d)
	a)A-B	b)B-C	c)C-D	d)A-C	d)A-C
45	Put your correct comments from the following on given the assertion and justification A. Assertion: Amphibians are evolved from fishes B. Justification: <i>Archaeopteryx</i> is a fossil linking fishes and amphibians				Answer option (a,b,c or d)
	a)Both A & B are true, as well as B is the correct justification	b) Both A & B are true, but Bis not the correct justification	c) A is true butB is false.	d)A is false but B istrue	c) A is true but B is false.
46	According to Darwin two different areas within a continent have differentspecies, because they have different				Answer option (a,b,c or d)
	(a) evolutionary mechanism	b)ancestor	c)environmen t	d)evolutionary times	c)environment
47	Most of the 700 species of fruit flies found in the Hawaiian archipelagoeach are restricted to a single island. One hypothesis to explain this pattern is that each species diverged after a small number of flies, hadcolonized a new island. This mechanism is called				Answer option (a,b,c or d)
	a)Sexual Selection	b)Genetic Equilibrium	c)Disruptive Selection	d)The founder effect	d)The founder effect
48	Find out false combination of statements from the following: A. The book “The Descent of man” was authored by Lamarck B. Emigration is the migration of individuals into an area C. Directional selection brings about progressive evolution D. Humans and apes are commonly called hominids				Answer option (a,b,c or d)
	a)A&B	b)B&C	c)C&D	d)D&A	a)A&B
49	Put your correct comments from the following on given the assertion and justification- A. Assertion: <i>Homo habilis</i> was the first tool maker being the humanancestor B. Justification: <i>Homo habilis</i> was basically a cave dweller				Answer option (a,b,c or d)
	a)Both A & B are true	b) A is true butB is not proper justification	c) Both A& B arefalse	d)A is true but b is not false	b) A is true but B is not proper justification
50	A horse has a Karyotype of 64 chromosomes and donkey has a Karyotype of 62 chromosomes. The hybrid offspring of a horse-donkey cross is mulewhich has 63 chromosome. A mule is sterile because it cannot successfully				Answer option (a,b,c or d)
	a)court other mules	b)copulate with mules, donkey or horses	c) form gamates	d)different copulatory organs	a)court other mules
51	Which of the following techniques is used to amplify DNA?				Answer option (a,b,c or d)

	a) Gel electrophoresis	b) Polymerase Chain Reaction (PCR)	c) Western blotting	d) ELISA	b) Polymerase Chain Reaction (PCR)
52	Match the following terms of their application:				Answer option (a,b,c or d)
	(A) SDS-PAGE	(i) Nucleic acid separation			
	(B) Vertical gel electrophoresis	(ii) Protein separation			
	(C) DNA barcode	(iii) Taxonomy and phylogeny			
	(D) Colorimetry	(iv) Light absorbance			
	a) A-i, B-ii, C-iii, D-iv	b) A-ii, B-i, C-iii, D-iv	c) A-ii, B-iii, C-ii, D-iv	d) A-iii, B-ii, C-i, D-iv	b) A-ii, B-i, C-iii, D-iv
53	Indicate the true statements on ELISA				Answer option (a,b,c or d)
	(A) ELISA can detect and quantify specific proteins, antibodies, and hormones. (B) ELISA uses an enzyme-linked antigen or antibody as a marker. (C) ELISA cannot be used to quantify substances; it only detects their presence. (D) ELISA is primarily used for DNA sequencing				
	a) A and C are true	b) B and D are true	c) A and B are true	d) C and D are true	c) A and B are true
54	Choose the correct option:				Answer option (a,b,c or d)
	A: Assertion: Regression analysis is used to predict the value of a dependent variable based on the value of one or more independent variables. B: Justification: In regression analysis, the dependent variable is always a categorical variable.				
	a) Both A and B are true	b) Both A and B are false	c) A is true, but B is false	d) A is false, but B is true	(c) A is true, but B is false
55	Which of the following is a measure of dispersion?				Answer option (a,b,c or d)
	a) Mean	b) Median	c) Mode	d) Standard deviation	
56	What is the probability of getting heads in a single toss of a fair coin?				Answer option (a,b,c or d)
	a) 0.25	b) 0.50	c) 0.75	d) 1	
57	Match the terms (left column) with their corresponding definitions or descriptions (right column) regarding regression equation:				Answer option (a,b,c or d)

	(A) a	(i) The y-intercept in a simple linear regression equation			
	(B) b	(ii) The slope of the regression line in a simple linear regression equation			
	(C) c	(iii) The correlation coefficient measuring the strength and direction of a linear relationship between two variables			
	(D) r	(iv) A constant in polynomial regression representing a specific term in the equation			
	a) A-iv, B-i, C-iii, D-ii	b) A-i, B-ii, C-iv, D-iii	c) a) A-iii, B-i, C-ii, D-iv	d) A-ii, B-i, C-iii, D-iv	b) A-i, B-ii, C-iv, D-iii
58	<p>Choose the correct statements:</p> <p>A In TLC, the stationary phase is usually a thin layer of silica gel or alumina coated on a plate.</p> <p>B The mobile phase in TLC is typically a gas.</p> <p>C The R_f value (retention factor) in TLC is used to quantify the movement of a compound relative to the solvent front.</p> <p>D The compounds in TLC move due to capillary action in the stationary phase.</p>				Answer option (a,b,c or d)
	a) A and B are correct	b) A and C are correct	c) A and D are correct	d) B and D are correct	b) A and C are correct
59	<p>Choose the correct option</p> <p>A: Assertion: Scanning Electron Microscopy (SEM) is used to obtain high-resolution images of the surface of a sample.</p> <p>B: Justification: SEM uses a beam of light to scan the surface of the sample.</p>				Answer option (a,b,c or d)
	a) A is correct, but B is wrong	b) Both A and B are correct	c) Both A and B are wrong	d) A is wrong, but B is correct	a) A is correct, but B is wrong
60	<p>Which of the following statements regarding the Polymerase Chain Reaction (PCR) technique is correct?</p>				Answer option (a,b,c or d)
	a) PCR is a method used to amplify specific DNA sequences in vitro.	b) PCR involves the synthesis of RNA from a DNA template.	c) PCR requires the use of a protein enzyme called reverse transcriptase.	d) PCR does not require the use of thermal cycling	a) PCR is a method used to amplify specific DNA sequences in vitro.
61	<p>Eukaryotic nucleus is made up of</p>				Answer option

	a) Single layer of biomembrane	b) Two layer of biomembrane	c) Three layer of biomembrane	d) No biomembrane	b) Two layer of biomembrane
62	Fluid mosaic model was proposed by				Answer option
	a) Singer and Nicolson	b) Davson and Danielli	c) Watson and Crick	d) Robert Hooke	a) Singer and Nicolson
63	Which of the following statement is/are true? A. Bacterium is unicellular organism. B. viruses are always living cells. C. Cell wall of fungi is made up of cellulose. D. Chloroplast has its own DNA.				Answer option
	a) Both A and B	b) Both B and C	c) Both C and D	d) Both A and D	d) Both A and D
64	Chose the correction option A: Assertion: Each organelle has a specific function in the cell. R: Reason: An organ is a group of tissues which perform a similar function.				Answer option
	a) Both A and R are correct and R is the correct explanation of A	b) Both A and R are correct but R not the correct explanation of A	c) A is correct but R is not correct	d) A is not correct but R is correct	b) Both A and R are correct but R not the correct explanation of A
65	Match the cell organelles with their function				Answer option
	A. Lysosome		i. Oxidize stored fats		
	B. Glyoxysome		ii. Protein synthesis		
	C. Mitochondria		iii. Phagocytosis		
	D. Ribosome		iv. ATP generation		
	a) A-iii, B-i, C-ii, D-iv	b) A-ii, B-iv, C-i, D-iii	c) A-ii, B-iii, C-iv, D-i	d) A-iii, B-i, C-iv, D-ii	d) A-iii, B-i, C-iv, D-ii
66	Which of the following enzyme of the Krebs cycle is not present in mitochondrial matrix?				Answer option
	a) Aconitase	b) Succinate dehydrogenase	c) Fumarate hydratase	d) Isocitrate dehydrogenase	b) Succinate dehydrogenase
67	Which of the following is/are false statement? A. Karl Landsteiner discovered human blood group. B. Basophils are enucleated. C. Edward Jenner stated that cowpox pustule could help to vaccinate against smallpox. D. Vaccination is a type of passive immunity.				Answer option
	a) Both A and C	b) Both A and B	c) Both B and C	d) Both C and D	a) Both A and C
68	Choose the correct option				Answer option

	A: Assertion: Skin act as anatomic berries as a part of innate immunity.				
	R: Reason: Skin has acidic environment (pH 3-5).				
	a) Both A and R are correct and R is the correct explanation of A	b) Both A and R are correct but R not the correct explanation of A	c) A is correct but R is not correct	d) A is not correct but R is correct	a) Both A and R are correct and R is the correct explanation of A
69	Match the type of macrophages to their tissue location				Answer option
	A. Alveolar macrophages	i. Liver			
	B. Histiocytes	ii. Lung			
	C. Kupffer cells	iii. kidney			
	D. Mesangial cells	iv. Connective tissue			
	a) A-iv, B-i, C-ii, D-iii	b) A-ii, B-iv, C-i, D-iii	c) A-ii, B-iv, C-iii, D-i	d) A-ii, B-i, C-iv, D-iii	b) A-ii, B-iv, C-i, D-iii
70	Which of the following cell has MHC I molecule?				Answer option
	a) All nucleated cell	b) Only B lymphocyte	c) Only T lymphocyte	d) None	a) All nucleated cell
71	Which of the following is NOT a characteristic of Mendelian inheritance?				b)Incomplete dominance
	a)Dominance	b)Incomplete dominance	c)Segregation	d)Independent assortment	b
72	The process by which cells become specialized during development is known as:				Differentiation
	a)Mitosis	b)Meiosis	c)Differentiation	d)Mutation	c
73	What is the role of HOX genes in development?				Determine body plan
	a)Regulate apoptosis	b)Control cell division	c)Determine body plan	d)Stimulate DNA repair	c
74	Which of the following is an example of a chromosomal abnormality?				a)Down syndrome
	a)Down syndrome	b)Tay-Sachs disease	c)Phenylketonuria	d)Duchenne muscular dystrophy	a
75	What is the function of the enzyme DNA polymerase during DNA replication?				b)Adds nucleotides to the new DNA strand
	a)Unzips the DNA double helix	b)Adds nucleotides to the new DNA strand	c)Repairs damaged DNA	d)Transcribes DNA into RNA	b
76	In humans, how many chromosomes are present in a somatic cell?				23 pairs
	a)23 pairs	b)46 pairs	c)23	d)46	a)

77	What is the primary function of the blastocyst during mammalian embryonic development?				a)Formation of the placenta
	a)Formation of the placenta	b)Development of the nervous system	c)Formation of the germ layers	d)Initiation of organogenesis	a
78	Which of the following is NOT one of the germ layers formed during gastrulation?				d)Epiderm
	a)Ectoderm	b)Mesoderm	c)Endoderm	d)Epiderm	d
79	The process of neurulation involves the formation of the:				b)Neural tube
	a)Notochord	b)Neural tube	c)Blastocyst	d)Neural crest cells	b
80	Which of the following is NOT a characteristic of stem cells?				c)Lack of ethical concerns
	a)Ability to self-renew	b)Capacity for unlimited differentiation	c)Lack of ethical concerns	d)Presence in various tissues	c
81	Which of the following is a type of RNA involved in protein synthesis?				
	a) snRNA	b) rRNA	c) yRNA	d) dsRNA	b) rRNA
82	Which two Uvr component molecules scan the DNA during nucleotide excision repair?				
	a) UvrB, UvrC	b) UvrC, UvrA	c) UvrD, UvrA	d) UvrA, UvrB	d) UvrA, UvrB
83	Which of the following is a character of ORF?				
	a) Non – overlapping	b) 3 – nucleotide codons	c) Contiguous	d) Intron	d) Intron
84	Which of the following will form a palindromic sequence?				
	a) AGTCCTGA	b) GTTCCAAG	c) ATTGCAAT	d) GTTGGAAC	c) ATTGCAAT
85	Which of the following does not occur during cell division in prokaryotes?				
	a) DNA rejoining	b) Strand passage	c) Multiple decatenations	d) DNA cleavage	c) Multiple decatenations
86	Which of the following is not required for DNA sequencing?				
	a) Polymerase chain reaction	b) Electrophoresis	c) Restriction digestion	d) Cloning	d) Cloning
87	During DNA cloning which of the following is not a crucial requirement?				
	a) Protein expression	b) Vector	c) Molecular cutter	d) DNA inserts	a) Protein expression
88	Pick the right difference between a DNA and RNA ?				
	a) Sugar and phosphate	b) Sugar and purines	c) Purines and phosphate	d) Sugar and pyrimidines	d) Sugar and pyrimidines
89	The coding sequences found in split genes are called-				
	a) Operons	b) Introns	c) Exons	d) Cistrons	c) Exons
90	Peptidyl transferase is-				
	a)A 23s rRNA	b)Forms peptide bonds	c)component of ribosome	d)All the three	d)All the three
91	Enzyme which can break and seal the DNA strand is -				

	a)Topoisomease II	b)Helicase	c)Primase	d)Restriction endonuclease	a)Topoisomease II
92	The first recombinant DNA molecule was synthesized in the year				
	a)1962	b)1972	c)1982	d)1992	b)1972
93	First human hormone produced by Recombinant DNA technology is -				
	a) Insulin	b) Thyroxine	c)Estrogen	d)Glucagon	a) Insulin
94	The basis of blue-white screening with pUC vector is-				
	a)Intraallelic complementation	b) Intergenic complementation	c) Intragenic suppression	d) Extragenic suppression	a)Intraallelic complementation
95	Which of the following is an example of a DNA vector?				
	a) A prophage.	b) An Hfr element.	c) An F factor.	d) All of these.	c) An F factor.
96	What type of digestive system do Platyhelminthes possess?				B
	A) Complete with mouth and anus	B) Incomplete with only a mouth	C) Absent	D) Complete with multiple openings	Incomplete with only a mouth
97	Find the incorrect matching pairs-				C
	A Choanocytes	i. Specialized cells responsible for water circulation and capturing food			
	B Spicules	ii. Structural elements that provide support and deter predators			
	C Osculum	iii. Large central cavity of the sponge			
	D Mesohyl	iv. Gelatinous matrix within a sponge containing various cells			
	a) Only A	b) Only B	c) Only C	d) Only D	Only C
98	Which statement is true in terms of "species equilibrium" in island biogeography: A. The point where the immigration and extinction rates of species are equal B. The balance between predator and prey species C. The equilibrium between invasive and native species D. The genetic balance within island populations				A
	a) A	b) B	c) C	d) D	The point where the immigration and extinction rates of species are equal
99	A: Assertion: Sponges (Porifera) do not have true tissues. B: Justification: Sponges have a cellular level of organization.				A
	a) Both A and B are true, and	b) Both A and B are true, but B is	c) A is true, but B is false.	d) A is false, but B is true.	Both A and B are true, and B

	B is the correct explanation of A.	not the correct explanation of A.			is the correct explanation of A.
100	What is the primary function of the radula in mollusks?				C
	A) Locomotion	B) Sensory perception	C) Feeding and scraping food	D) Gas exchange	Feeding and scraping food