

SET-“Y”

(Total No. of printed pages : 17)

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

PG-EE-June, 2023

LIFE SCIENCES

Sr. No. 1629

Code

A

Time : 1½ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

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Father's Name : _____ Mother's Name : _____

Date of Examination : _____

(Signature of the candidate)

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Question No.	Questions
18.	<p>General size of bound peptide to MHC II molecule is :</p> <p>(1) 8–10 amino acids (2) 13–18 amino acids (3) 19–24 amino acids (4) 25–36 amino acids</p>
19.	<p>Cellular Totipotency property is present in :</p> <p>(1) Plants (2) Vertebrates (3) Non-Vertebrates (4) Viruses</p>
20.	<p>Scientist known as <i>Father of Antiseptic Surgery</i> :</p> <p>(1) Joseph Lister (2) Edward Jenner (3) Louis Pasteur (4) Robert Koch</p>
21.	<p>Spectrophotometer measures the absorbance of :</p> <p>(1) Only coloured solutions (2) Only colourless solutions (3) Both coloured and colourless solutions (4) None of these</p>
22.	<p>Shine – Dalgarno sequence is rich in :</p> <p>(1) Purine bases (2) Pyrimidine bases (3) Equal amount of purine and pyrimidine bases (4) 25% purine + 75% pyrimidine bases</p>
23.	<p>Western blotting is used for the transfer of :</p> <p>(1) DNA (2) RNA (3) Lipid (4) Protein</p>

Question No.	Questions
24.	<p>The induced fit hypothesis of Koshland is related to :</p> <p>(1) Enzyme action (2) Hormone action (3) Carbohydrate function (4) Lipid function</p>
25.	<p>Metabolism is :</p> <p>(1) Catabolism (2) Anabolism (3) Catabolism + Anabolism (4) None of those</p>
26.	<p>FAD is the coenzyme form of :</p> <p>(1) Riboflavin (2) Niacin (3) Pantothenic Acid (4) Pyridoxine</p>
27.	<p><i>Bt</i>-cotton is :</p> <p>(1) Transgenic plant (2) Cloned plant (3) Hybrid plant (4) Mutated plant</p>
28.	<p>Watchman of the genome to prevent oncogene activation is :</p> <p>(1) p53 (2) Cdk4 (3) Cdk6 (4) Cyclin D1</p>
29.	<p>Leaf like structure in Pteridophytes that bear spores are called as</p> <p>(1) Sporophylls (2) Pteridophylls (3) Sporangia (4) Sporophyte</p>
30.	<p>Which one of the following is an antioxidant ?</p> <p>(1) Vitamin-A (2) Vitamin-E (3) Vitamin-K (4) Vitamin-D</p>

Question No.	Questions
56.	Mahseer is the state fish of which state ? (1) Orissa (2) Kerala (3) Bihar (4) Karnataka
57.	Which of the following pest causes curling of leaves in tomato ? (1) Aphids (2) Leafhopper (3) Whitefly (4) All of the above
58.	How many spots hadda beetle has on its back ? (1) 20 (2) 26 (3) 28 (4) 16
59.	Most abundant and basic Auxin is (1) IAA (2) NAA (3) 1BA (4) 2-4 D
60.	Which test is used for testing the significance of mean differences ? (1) t-test (2) f-test (3) z-test (4) k^2 -test
61.	Which of the following is NOT a step in Black tea manufacture ? (1) Drying/Firing (2) Rolling (3) Withering (4) Lump formation

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85.	<p>What are Nissl bodies ?</p> <p>(1) Golgi bodies (2) Lysosomes (3) Cluster of rough endoplasmic reticulum (4) Mitochondria</p>
86.	<p>Which of the following is protein hormone ?</p> <p>(1) Oxytocin (2) Insulin (3) TSH (4) Antidiuretic hormone</p>
87.	<p>Which of the following is NOT true for Rods ?</p> <p>(1) Used for scotopic vision (2) Loss causes night blindness (3) Not very light sensitive (4) Confer achromatic vision</p>
88.	<p>In which class is Aristotle's lantern present ?</p> <p>(1) Asteroidea (2) Echinoidea (3) Holothuroidea (4) Ophiuroidea</p>
89.	<p>Which of the following animals is not a vertebrate ?</p> <p>(1) Oryctolagus (2) Eurotyphlis (3) Sparrow (4) Amphioxus</p>
90.	<p>In which of the following the notochord is present in embryonic stage ?</p> <p>(1) Vertebrates (2) Some chordates (3) All chordates (4) Non-chordates</p>
91.	<p>Retrogressive metamorphosis is found in :</p> <p>(1) Balanoglossus (2) Branchiostoma (3) Herdmania (4) All of these</p>
92.	<p>Animals having a built-in thermostat to maintain constant temperature are known as :</p> <p>(1) Biothermic (2) Poikilothermic (3) Oligothermic (4) Homoiothermic</p>

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93.	What is the study of ancient plants called ? (1) Paleontology (2) Palynology (3) Paleobotany (4) Paleobiology
94.	Which of the following is not a characteristic of the Devonian period ? (1) Land plants first appeared (2) Fish with jaws evolved (3) Dinosaurs first appeared (4) Wingless insects evolved
95.	Fruiting bodies of slime molds are called : (1) acervulus (2) sori (3) apothecium (4) perithecium
96.	The common yeast <i>Schizosaccharomyces</i> follows which of the following asexual reproduction methods ? (1) binary fission (2) budding (3) fragmentation (4) spore formation
97.	Cell walls of diatoms are impregnated with (1) chitin (2) cellulose (3) starch (4) silica
98.	Gullet is present in which algae ? (1) Euglenoids (2) Golden algae (3) Dinoflagellates (4) Green algae
99.	In which phase of growth does the recipient cell take up the donor DNA ? (1) lag phase (2) early logarithmic phase (3) late logarithmic phase (4) stationary phase
100.	Which of the following has beads on a string structure ? (1) Chromosomes (2) Chromatin (3) Nucleosomes (4) Heterochromatin

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PG-EE-June, 2023

LIFE SCIENCES

Code

B

Sr. No. ~~11630~~

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1.	If a single base substitution modifies a codon to a termination codon, the chain may terminate at the point of mutation. Such mutations are called : (1) Frame shift Mutation (2) Mis-sense Mutation (3) Non-sense Mutation (4) Germinal Mutation
2.	Which of the following is not macromolecule : (1) Amino acids (2) Fatty acids (3) Lipids (4) Polysaccharides
3.	In which city, National Centre for DNA fingerprinting and Diagnostics is situated ? (1) Hyderabad (2) Ahmedabad (3) Secunderabad (4) Dhanbad
4.	The difference between nucleotide and nucleoside is that nucleoside lacks: (1) Nitrogenous base (2) Pentose Sugar (3) Deoxy ribose (4) Phosphate
5.	Gram negative bacterial cell wall contains higher content of : (1) Lipid (2) Carbohydrate (3) Protein (4) Peptidoglycan
6.	In osmosis, water moves from : (1) Hypotonic Solution to Hypertonic Solution (2) Hypertonic Solution to Isotonic Solution (3) Hypertonic Solution to Hypotonic Solution (4) Hypotonic Solution to Isotonic Solution

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7.	For preparing 0.1M NaOH, how much amount of NaOH is required : (1) 0.04g (2) 0.4g (3) 4g (4) 40g
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9.	Cellular Totipotency property is present in : (1) Plants (2) Vertebrates (3) Non-Vertebrates (4) Viruses
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33.	Recombinant DNase is used for treatment of : (1) Muscular Dystrophy (2) Cystic fibrosis (3) Multiple sclerosis (4) Kidney disorders
34.	Antibody molecules are held together by : (1) Disulphide bonds (2) Ester bonds (3) Glycosidic bonds (4) All of these
35.	Pasteur effect is due inhibition of glycolysis because of : (1) Creatine phosphate (2) ATP (3) ADP (4) AMP
36.	Mahseer is the state fish of which state ? (1) Orissa (2) Kerala (3) Bihar (4) Karnataka
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61.	Coir of commerce comes from which part of coconut ? (1) Mesocarp (2) Epicarp (3) Endocarp (4) None of these
62.	Which one is diamino dicarboxylic amino acid ? (1) Cystine (2) Lysine (3) Cysteine (4) Aspartic Acid
63.	Which of the following gives rise to cork tissue ? (1) Phellogen (2) Periblem (3) Periderm (4) Phelloderm
64.	Himgiri is a variety of resistant to hill bunt disease. (1) Rice (2) Wheat (3) Maize (4) Cowpea

Question No.	Questions
70.	Which of the following develops from ectoderm ? (1) Spinal cord and brain (2) Liver and heart (3) Eye and skin (4) Notochord and vertebral column
71.	Which of the following is NOT a step in Black tea manufacture ? (1) Drying/Firing (2) Rolling (3) Withering (4) Lump formation
72.	Oolong Tea is (1) Mixture of Green and Black tea (2) Partial Oxidation takes place (3) The leaves are greenish brown (4) All of the mentioned
73.	National medical plants board is located in : (1) Nagpur (2) Ahmedabad (3) Hyderabad (4) New Delhi
74.	Which one is the family of <i>liquorice</i> ? (1) Malvaceae. (2) Liliaceae. (3) Fabaceae. (4) Rosaceae.
75.	Synthesis of cytoplasm and cell wall material takes place during : (1) Maturation (2) Cell division (3) Elongation (4) Differentiation

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SET-“Y”

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LIFE SCIENCES

Sr. No. 11627

Code **C**

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2.	Which one is diamino dicarboxylic amino acid ? (1) Cystine (2) Lysine (3) Cysteine (4) Aspartic Acid
3.	Which of the following gives rise to cork tissue ? (1) Phellogen (2) Periblem (3) Periderm (4) Phelloderm
4.	Himgiri is a variety of resistant to hill bunt disease. (1) Rice (2) Wheat (3) Maize (4) Cowpea
5.	What was the most significant trend in the evolution of modern man (<i>Homo sapiens</i>) from his ancestors ? (1) Increasing cranial capacity (2) Upright posture (3) Shortening of jaws (4) Binocular vision
6.	National Bureau of Fish Genetic Resources is located at ? (1) Jabalpur, Madhya Pradesh (2) Lucknow, Uttar Pradesh (3) Hyderabad, Andhra Pradesh (4) Patna, Bihar

Question No.	Questions
7.	Aphid, small, sap-sucking insects are examples of (1) Oviparous (2) Viviparous (3) Paedogenesis (4) Parthenogenesis
8.	Horse became 3 toed and very successful in : (1) Pliohippus (2) Eohippus (3) Hipparion (4) Parahippus
9.	Cleidoic eggs are found in : (1) Birds (2) Mammals (3) Insects (4) Mollusca
10.	Which of the following develops from ectoderm ? (1) Spinal cord and brain (2) Liver and heart (3) Eye and skin (4) Notochord and vertebral column
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20.	<p>Which one of the following is an antioxidant ?</p> <p>(1) Vitamin-A (2) Vitamin-E (3) Vitamin-K (4) Vitamin-D</p>
21.	<p>Which bond participates in maintaining the three-dimensional structure of a macromolecule is :</p> <p>(1) Peptide bond (2) Phosphodiester bond (3) Glycosidic bond (4) Hydrogen bond</p>
22.	<p>Which of the following are archaeo bacteria ?</p> <p>(1) Green sulphur bacteria (2) Purple sulphur bacteria (3) Mycoplasma (4) Methanogens</p>
23.	<p>Correct method of writing the name of a bacterium is :</p> <p>(1) <i>Pseudomonas aeruginosa</i> (2) <i>Pseudomonas aeruginosa</i> (3) <i>Pseudomonas aeruginosa</i> (4) <i>pseudomonas aeruginosa</i></p>
24.	<p>How much amount of concentrated acid is required to prepare one litre of $1N H_2SO_4$ from concentrated acid whose purity (96%), specific gravity (1.84), molecular weight (98) :</p> <p>(1) 27.74 ml (2) 55.48 ml (3) 110.96 ml (4) 221.92 ml</p>
25.	<p>Phycology is the study of :</p> <p>(1) Algae (2) Fungi (3) Protozoans (4) Worms</p>

Question No.	Questions
26.	<p>Which of the following is not used as Bio-fertilizer :</p> <p>(1) <i>Rhizobium</i> (2) <i>Azotobacter</i> (3) <i>Trichoderma</i> (4) <i>Azospirillum</i></p>
27.	<p>In genetic code table, number of codons for methionine is :</p> <p>(1) One (2) Two (3) Three (4) Four</p>
28.	<p>Which of the following is not microbial insecticide :</p> <p>(1) <i>Bacillus thuringiensis</i> (2) <i>Hirsutella thompsonii</i> (3) <i>Heliothis nuclear polyhedrosis Virus</i> (4) <i>Agrobacterium radiobacter</i></p>
29.	<p>Chloramphenicol acts by :</p> <p>(1) Inhibiting cell wall synthesis (2) Damage to cytoplasmic membrane (3) Inhibition of protein synthesis (4) Inhibition of specific enzyme systems</p>
30.	<p>In bacteria, process for the transfer of genes from one cell to another by a bacteriophage is known as</p> <p>(1) Conjugation (2) Transduction (3) Transformation (4) Transfection</p>

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58.	<p>Which of the following is controlled by autonomous nervous system ?</p> <p>(1) Papillary reflex (2) Swallowing of food (3) Knee-jerk response (4) Peristalsis of intestine</p>
59.	<p>Glomerular capsule and Convolted tubules always lie within the</p> <p>(1) Renal pelvis (2) Renal medulla (3) Renal cortex (4) None of these</p>
60.	<p>If a person undergoes a prolonged fasting then his urine will be found to contain higher levels of :</p> <p>(1) Ketones (2) Amino acids (3) Fats (4) Glucose</p>
61.	<p>Name those living organisms which secrete nitrogen in form of urea ?</p> <p>(1) Ureotelic (2) Uricotelic (3) Ammonotelic (4) Nitroso compounds</p>
62.	<p>Which of the following is a Hill reagent ?</p> <p>(1) Sugar (2) Chlorophylls (3) 2, 6-dichlorophenolindophenol (4) Nicotinamide adenine dinucleotide phosphate</p>

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63.	Out of the following, which one is not the inhibitor of the electron transport chain ? (1) Rotenone (2) Antimycin A (3) Cyanide (4) Malonate
64.	Name the first transgenic virus resistant plant ? (1) Rice (2) Cotton (3) Tobacco (4) Tomato
65.	Name the enzyme which has silenced to delay the ripening process ? (1) Polygalacturonase (2) Glyphosate (3) ADA (4) P53
66.	Which of the following is NOT true for agrobacterium ? (1) Horizontal gene transfer (2) Gram positive bacteria (3) Causes tumor in plants (4) Transfer DNA in plants
67.	Name the first vector used for a mammalian cell ? (1) Lambda phage (2) SV40 (3) M13 (4) EMBL3
68.	Which of the following is NOT an endonuclease ? (1) Mung bean nuclease (2) S1 nuclease (3) Terminal deoxynucleotidyl transferase (4) RNase A

Question No.	Questions
75.	What are Nissl bodies ? (1) Golgi bodies (2) Lysosomes (3) Cluster of rough endoplasmic reticulum (4) Mitochondria
76.	Which of the following is protein hormone ? (1) Oxytocin (2) Insulin (3) TSH (4) Antidiuretic hormone
77.	Which of the following is NOT true for Rods ? (1) Used for scotopic vision (2) Loss causes night blindness (3) Not very light sensitive (4) Confer achromatic vision
78.	In which class is Aristotle's lantern present ? (1) Asteroidea (2) Echinoidea (3) Holothuroidea (4) Ophiuroidea
79.	Which of the following animals is not a vertebrate ? (1) Oryctolagus (2) Eurotyphlis (3) Sparrow (4) Amphioxus
80.	In which of the following the notochord is present in embryonic stage ? (1) Vertebrates (2) Some chordates (3) All chordates (4) Non-chordates
81.	If a single base substitution modifies a codon to a termination codon, the chain may terminate at the point of mutation. Such mutations are called : (1) Frame shift Mutation (2) Mis-sense Mutation (3) Non-sense Mutation (4) Germinal Mutation

Question No.	Questions
88.	General size of bound peptide to MHC II molecule is : (1) 8–10 amino acids (2) 13–18 amino acids (3) 19–24 amino acids (4) 25–36 amino acids
89.	Cellular Totipotency property is present in : (1) Plants (2) Vertebrates (3) Non-Vertebrates (4) Viruses
90.	Scientist known as <i>Father of Antiseptic Surgery</i> : (1) Joseph Lister (2) Edward Jenner (3) Louis Pasteur (4) Robert Koch
91.	ICAR-Central Institute of Brackish Water is located at ? (1) Patna (2) Kochi (3) Chennai (4) Bhubaneswar
92.	Migratory fish that lives in fresh water but breeds in salt water is known as: (1) Potamodromus fish (2) Anadromous fish (3) Catadromous fish (4) None of these
93.	Recombinant DNase is used for treatment of : (1) Muscular Dystrophy (2) Cystic fibrosis (3) Multiple sclerosis (4) Kidney disorders
94.	Antibody molecules are held together by : (1) Disulphide bonds (2) Ester bonds (3) Glycosidic bonds (4) All of these

Question No.	Questions
95.	Pasteur effect is due inhibition of glycolysis because of : (1) Creatine phosphate (2) ATP (3) ADP (4) AMP
96.	Mahseer is the state fish of which state ? (1) Orissa (2) Kerala (3) Bihar (4) Karnataka
97.	Which of the following pest causes curling of leaves in tomato ? (1) Aphids (2) Leafhopper (3) Whitefly (4) All of the above
98.	How many spots hadda beetle has on its back ? (1) 20 (2) 26 (3) 28 (4) 16
99.	Most abundant and basic Auxin is (1) IAA (2) NAA (3) 1BA (4) 2-4 D
100.	Which test is used for testing the significance of mean differences ? (1) t-test (2) f-test (3) z-test (4) k^2 -test

SET-“Y”

(Total No. of printed pages : 17)

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

PG-EE-June, 2023

LIFE SCIENCES

Code

D

Sr. No. ~~11628~~

Time : 1¼ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Date of Birth : _____

Father's Name : _____ Mother's Name : _____

Date of Examination : _____

(Signature of the candidate)

(Signature of the Invigilator)

**CANDIDATES MUST READ THE FOLLOWING INFORMATION/
INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.**

1. All questions are compulsory.
2. The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along with answer key of all the A,B,C and D code will be uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examinations in writing within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers MUST NOT be ticked in the Question book-let.
6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
7. Use only Black or Blue **BALL POINT PEN** of good quality in the OMR Answer-Sheet.
8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Questions
7.	Name the first vector used for a mammalian cell ? (1) Lambda phage (2) SV40 (3) M13 (4) EMBL3
8.	Which of the following is NOT an endonuclease ? (1) Mung bean nuclease (2) S1 nuclease (3) Terminal deoxynucleotidyl transferase (4) RNase A
9.	How many isoprene units, are there in sesquiterpenes ? (1) 1 (2) 2 (3) 3 (4) 8
10.	Name the class of secondary metabolites which is characterized by the presence of the hydroxyl group with an aromatic ring ? (1) Glycosides (2) Phenolics (3) Alkaloids (4) Terpenes
11.	ICAR-Central Institute of Brackish Water is located at ? (1) Patna (2) Kochi (3) Chennai (4) Bhubaneswar
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Question No.	Questions
26.	Variation in gene frequencies within populations can occur by chance rather than by natural selection. This is referred to as : (1) Genetic flow (2) Genetic drift (3) Random mating (4) Genetic load
27.	What is common to whale, seal and shark ? (1) Homeothermy (2) Convergent evolution (3) Seasonal migration (4) Thick subcutaneous fat
28.	Which of the following is controlled by autonomous nervous system ? (1) Papillary reflex (2) Swallowing of food (3) Knee-jerk response (4) Peristalsis of intestine
29.	Glomerular capsule and Convolted tubules always lie within the (1) Renal pelvis (2) Renal medulla (3) Renal cortex (4) None of these
30.	If a person undergoes a prolonged fasting then his urine will be found to contain higher levels of : (1) Ketones (2) Amino acids (3) Fats (4) Glucose
31.	If a single base substitution modifies a codon to a termination codon, the chain may terminate at the point of mutation. Such mutations are called : (1) Frame shift Mutation (2) Mis-sense Mutation (3) Non-sense Mutation (4) Germinal Mutation

Question No.	Questions
38.	<p>General size of bound peptide to MHC II molecule is :</p> <p>(1) 8–10 amino acids (2) 13–18 amino acids (3) 19–24 amino acids (4) 25–36 amino acids</p>
39.	<p>Cellular Totipotency property is present in :</p> <p>(1) Plants (2) Vertebrates (3) Non-Vertebrates (4) Viruses</p>
40.	<p>Scientist known as <i>Father of Antiseptic Surgery</i> :</p> <p>(1) Joseph Lister (2) Edward Jenner (3) Louis Pasteur (4) Robert Koch</p>
41.	<p>Retrogressive metamorphosis is found in :</p> <p>(1) Balanoglossus (2) Branchiostoma (3) Herdmania (4) All of these</p>
42.	<p>Animals having a built-in thermostat to maintain constant temperature are known as :</p> <p>(1) Biothermic (2) Poikilothermic (3) Oligothermic (4) Homoiothermic</p>
43.	<p>What is the study of ancient plants called ?</p> <p>(1) Paleontology (2) Palynology (3) Paleobotany (4) Paleobiology</p>

Question No.	Questions
44.	Which of the following is not a characteristic of the Devonian period ? (1) Land plants first appeared (2) Fish with jaws evolved (3) Dinosaurs first appeared (4) Wingless insects evolved
45.	Fruiting bodies of slime molds are called : (1) acervulus (2) sori (3) apothecium (4) perithecium
46.	The common yeast <i>Schizosaccharomyces</i> follows which of the following asexual reproduction methods ? (1) binary fission (2) budding (3) fragmentation (4) spore formation
47.	Cell walls of diatoms are impregnated with (1) chitin (2) cellulose (3) starch (4) silica
48.	Gullet is present in which algae ? (1) Euglenoids (2) Golden algae (3) Dinoflagellates (4) Green algae
49.	In which phase of growth does the recipient cell take up the donor DNA ? (1) lag phase (2) early logarithmic phase (3) late logarithmic phase (4) stationary phase
50.	Which of the following has beads on a string structure ? (1) Chromosomes (2) Chromatin (3) Nucleosomes (4) Heterochromatin
51.	Which of the following is NOT a step in Black tea manufacture ? (1) Drying/Firing (2) Rolling (3) Withering (4) Lump formation

Question No.	Questions
52.	Oolong Tea is (1) Mixture of Green and Black tea (2) Partial Oxidation takes place (3) The leaves are greenish brown (4) All of the mentioned
53.	National medical plants board is located in : (1) Nagpur (2) Ahmedabad (3) Hyderabad (4) New Delhi
54.	Which one is the family of <i>liquorice</i> ? (1) Malvaceae. (2) Liliaceae. (3) Fabaceae. (4) Rosaceae.
55.	Synthesis of cytoplasm and cell wall material takes place during : (1) Maturation (2) Cell division (3) Elongation (4) Differentiation
56.	The notochord is one of few prominent structural features in chick embryo of about : (1) 15 hours (2) 18 hours (3) 13 hours (4) 10 hours
57.	Name the enzyme secreted by pancreas ? (1) Pepsin (2) Chymotrypsin (3) Trypsin (4) Alcohol dehydrogenase






Question No.	Questions
76.	National Bureau of Fish Genetic Resources is located at ? (1) Jabalpur, Madhya Pradesh (2) Lucknow, Uttar Pradesh (3) Hyderabad, Andhra Pradesh (4) Patna, Bihar
77.	Aphid, small, sap-sucking insects are examples of (1) Oviparous (2) Viviparous (3) Paedogenesis (4) Parthenogenesis
78.	Horse became 3 toed and very successful in : (1) Pliohippus (2) Eohippus (3) Hipparion (4) Parahippus
79.	Cleidoic eggs are found in : (1) Birds (2) Mammals (3) Insects (4) Mollusca
80.	Which of the following develops from ectoderm ? (1) Spinal cord and brain (2) Liver and heart (3) Eye and skin (4) Notochord and vertebral column
81.	Spectrophotometer measures the absorbance of : (1) Only coloured solutions (2) Only colourless solutions (3) Both coloured and colourless solutions (4) None of these

Question No.	Questions
82.	Shine – Dalgarno sequence is rich in : (1) Purine bases (2) Pyrimidine bases (3) Equal amount of purine and pyrimidine bases (4) 25% purine + 75% pyrimidine bases
83.	Western blotting is used for the transfer of : (1) DNA (2) RNA (3) Lipid (4) Protein
84.	The induced fit hypothesis of Koshland is related to : (1) Enzyme action (2) Hormone action (3) Carbohydrate function (4) Lipid function
85.	Metabolism is : (1) Catabolism (2) Anabolism (3) Catabolism + Anabolism (4) None of those
86.	FAD is the coenzyme form of : (1) Riboflavin (2) Niacin (3) Pantothenic Acid (4) Pyridoxine
87.	<i>Bt</i> -cotton is : (1) Transgenic plant (2) Cloned plant (3) Hybrid plant (4) Mutated plant

Question No.	Questions
88.	<p>Watchman of the genome to prevent oncogene activation is :</p> <p>(1) p53 (2) Cdk4 (3) Cdk6 (4) Cyclin D1</p>
89.	<p>Leaf like structure in Pteridophytes that bear spores are called as</p> <p>(1) Sporophylls (2) Pteridophylls (3) Sporangia (4) Sporophyte</p>
90.	<p>Which one of the following is an antioxidant ?</p> <p>(1) Vitamin-A (2) Vitamin-E (3) Vitamin-K (4) Vitamin-D</p>
91.	<p>Which bond participates in maintaining the three-dimensional structure of a macromolecule is :</p> <p>(1) Peptide bond (2) Phosphodiester bond (3) Glycosidic bond (4) Hydrogen bond</p>
92.	<p>Which of the following are archaeo bacteria ?</p> <p>(1) Green sulphur bacteria (2) Purple sulphur bacteria (3) Mycoplasma (4) Methanogens</p>
93.	<p>Correct method of writing the name of a bacterium is :</p> <p>(1) <i>Pseudomonas aeruginosa</i> (2) <i>Pseudomonas aeruginosa</i> (3) <i>Pseudomonas aeruginosa</i> (4) <i>pseudomonas aeruginosa</i></p>
94.	<p>How much amount of concentrated acid is required to prepare one litre of $1N H_2SO_4$ from concentrated acid whose purity (96%), specific gravity (1.84), molecular weight (98) :</p> <p>(1) 27.74 ml (2) 55.48 ml (3) 110.96 ml (4) 221.92 ml</p>

Question No.	Questions
95.	Phycology is the study of : (1) Algae (2) Fungi (3) Protozoans (4) Worms
96.	Which of the following is not used as Bio-fertilizer : (1) <i>Rhizobium</i> (2) <i>Azotobacter</i> (3) <i>Trichoderma</i> (4) <i>Azospirillum</i>
97.	In genetic code table, number of codons for methionine is : (1) One (2) Two (3) Three (4) Four
98.	Which of the following is not microbial insecticide : (1) <i>Bacillus thuringiensis</i> (2) <i>Hirsutella thompsonii</i> (3) <i>Heliothis nuclear polyhedrosis Virus</i> (4) <i>Agrobacterium radiobacter</i>
99.	Chloramphenicol acts by : (1) Inhibiting cell wall synthesis (2) Damage to cytoplasmic membrane (3) Inhibition of protein synthesis (4) Inhibition of specific enzyme systems
100.	In bacteria, process for the transfer of genes from one cell to another by a bacteriophage is known as (1) Conjugation (2) Transduction (3) Transformation (4) Transfection

ANSWER KEYS OF MSC. LIFE SCIENCES 2 YEAR COURSE FOR SESSION 2023-24				
Q. NO.	A	B	C	D
1	4	3	1	1
2	4	4	1	3
3	3	1	1	4
4	1	4	2	4
5	1	1	1	1
6	3	1	2	2
7	1	3	2	2
8	4	2	3	3
9	3	1	2	4
10	2	1	1	2
11	3	3	3	2
12	4	4	1	2
13	1	3	4	2
14	4	3	1	1
15	1	2	3	2
16	1	1	1	1
17	3	4	1	3
18	2	1	1	3
19	1	2	3	1
20	1	3	2	1
21	3	1	4	2
22	1	3	4	3
23	4	4	3	4
24	1	4	1	4
25	3	1	1	1
26	1	2	3	2
27	1	2	1	2
28	1	3	4	4
29	3	4	3	3
30	2	2	2	1
31	2	2	3	3
32	3	2	4	4
33	4	2	3	1
34	4	1	3	4
35	1	2	2	1
36	2	1	1	1
37	2	3	4	3
38	4	3	1	2
39	3	1	2	1
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41	1	2	4	3
42	1	3	4	4
43	1	4	4	3
44	2	4	3	3
45	1	1	2	2
46	2	2	2	1
47	2	2	3	4
48	3	4	4	1
49	2	3	2	2
50	1	1	4	3

ANSWER KEYS OF MSC. LIFE SCIENCES 2 YEAR COURSE FOR SESSION 2023-24				
Q. NO.	A	B	C	D
51	2	3	2	4
52	2	1	3	4
53	2	4	4	4
54	1	1	4	3
55	2	3	1	2
56	1	1	2	2
57	3	1	2	3
58	3	1	4	4
59	1	3	3	2
60	1	2	1	4
61	4	1	1	1
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63	4	1	4	4
64	3	2	4	4
65	2	1	1	3
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67	3	2	2	3
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87	3	1	3	1
88	2	4	2	1
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91	3	1	2	4
92	4	3	2	4
93	3	4	2	3
94	3	4	1	1
95	2	3	2	1
96	1	2	1	3
97	4	3	3	1
98	1	2	3	4
99	2	4	1	3
100	3	3	1	2

SPM

RD Kumar - Recheck
Mishra

Woj