

Application No. : _____.



Gujarat Biotechnology Research Centre

Marine Biotechnology Mains Exam

Scientist-B (Group-I)

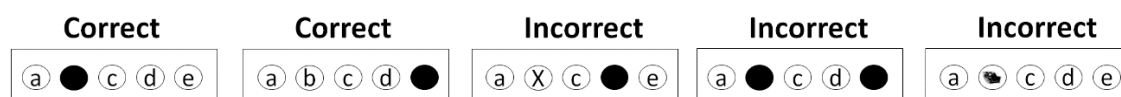
Total MCQ: 200

Total Duration: 2 Hours

Do not open unless asked to do so

Instructions for Candidate:

1. This question booklet contains 200 questions and each correct answer carries 1 mark.
2. Every attempted question with an incorrect answer shall carry a negative mark of 0.25.
3. Choose 'E' Option if you don't want to attempt a question, if no option is marked, 0.25 marks will be deducted.
4. Use only Blue/Black Ball Point Pen to darken the appropriate circle in OMR.
5. Please darken the complete circle.
6. Darken **ONLY ONE CIRCLE** for each question as shown below:



7. The answer once marked, cannot be changed.
8. Please do not make any stray marks on the Question Booklet.
9. Do not fold the OMR sheet.
10. Rough work must be done on the blank page of the Question Booklet.
11. Mark your answer in the appropriate space in the Answer Sheet against the Number corresponding to the question.
12. The Candidate has to submit a Question booklet and OMR response sheet to the invigilator at the conclusion of the examination.

I have read all above instructions

Candidate Signature: _____

Invigilator Signature: _____

1	..... involves the creation of products and processes from marine organisms through the application of biotechnology, molecular and cell biology, and bioinformatics			
	A	Marine Biology	B	Marine Biotechnology
	C	Marine engineering	D	Marine Biochemistry
2	Hermaphroditism is a common phenomenon in			
	A	Sponges	B	Zooplankton
	C	Coral reef fishes	D	Cyanobacteria
3	Cephalosporin is an antibiotic derived from			
	A	Marine bacteria	B	Marine sponge
	C	Marine yeast	D	Marine fungi
4	Trabectedin is an anticancer compound derived from			
	A	Caribbean tunicate	B	Caribbean sponge
	C	Caribbean dogfish	D	Caribbean snail
5	..... is an exploration of natural sources for small molecules, macromolecules and biochemical and genetic information that could be developed into commercially valuable products.			
	A	Bioprospecting	B	Bioprocessing
	C	Biomagnification	D	Bioleaching
6	Biogas is also known as			
	A	Bioethanol	B	Biomethane
	C	Biodiesel	D	Biohydrogen
7	Second generation biofuel is derived from			
	A	Algal biomass	B	Agricultural waste biomass
	C	Food crops	D	Genetically engineered crops
8	Marine national park in Gujarat is located in			
	A	Bhavnagar	B	Jamnagar
	C	Rajkot	D	Surat
9	Northern blotting is done for the detection of			
	A	DNA	B	RNA
	C	Proteins	D	Lipid
10	SYBR green dye is used in			
	A	Colony PCR	B	qRT-PCR
	C	RACE	D	Gel electrophoresis
11	Constructing a visual representation of the product is also called:			
	A	Product strategy	B	Business canvas model
	C	Prototyping	D	Trials
12	Acridine orange is a fluorescence dye that binds to			
	A	Protein	B	Nucleic acid
	C	Carbohydrate	D	Lipid
13	<i>Vibrio fischeri</i> is a bioluminescence			
	A	Freshwater bacteria	B	Methanogen
	C	Marine bacteria	D	Thermophiles
14	Biorefinery is defined as			

	A	refinery that converts biomass to energy and other beneficial byproducts	B	refinery that converts biomass to beneficial byproducts
	C	refinery that converts biomass to energy	D	refinery that converts biomass to biochemicals
15	True replication of DNA takes place due to			
	A	Adenine and Thymine	B	Cytocine and Thymine
	C	Complementary base pairing rule	D	Hydrogen bonding
16	Viruses are			
	A	large obligate intracellular parasites	B	small obligate intracellular parasites
	C	small obligate extracellular parasites	D	large obligate extracellular parasites
17	Gene transcription is initiated at			
	A	Promoter	B	Operator
	C	OriC	D	Structural gene
18	The correct mechanism of gene expression is			
	A	RNA-DNA-Protein	B	Protein-RNA-DNA
	C	DNA-RNA-Protein	D	Protein-DNA-RNA
19	RNA polymerase is discovered by			
	A	Eva Ekeblad	B	Jean Purdy
	C	Maurice Lemoigne	D	Samuel Weiss
20	<i>Thermus aquaticus</i> is the source of			
	A	Ligase	B	Taq polymerase
	C	Cellulase	D	Lipase
21	Laminarin is found in			
	A	Green seaweed	B	Red seaweed
	C	Brown seaweed	D	Microalgae
22	<i>Dunaliella salina</i> is			
	A	Macroalgae	B	Seagrass
	C	Microalgae	D	Phytoplankton
23	The two strands of DNA for replication are separated by			
	A	RNA polymerase	B	DNA polymerase
	C	Gyrase	D	Helicase
24	Polyhydroxyalkanoates are example of			
	A	Biooil	B	Bioplastic
	C	Biofuel	D	Biomineral
25	Microalgae is a rich source of			
	A	Protein	B	Carbohydrate
	C	Mineral	D	Lipid
26	Sequence of PCR reaction is			
	A	Denaturation-Annealing- Extension	B	Annealing-Extension- Denaturation
	C	Denaturation-Extension- Annealing	D	Denaturation-Seperation- Annealing

27	Valine is a			
	A	Nonessential amino acids	B	Essential amino acids
	C	Biopeptide	D	Carbohydrate
28	Number of total amino acids are			
	A	18	B	19
	C	20	D	21
29	Fouling caused by organisms such as mussels and barnacles is referred as			
	A	Biofilm	B	Macrofouling
	C	Quorum sensing	D	Microfouling
30	The Marine National Park-Priotan was declared in			
	A	January 1982	B	July 1982
	C	October 1982	D	December 1982
31	The major biomolecules found in nature are			
	A	Carbohydrate, Protein, Lipid, Nucleic acid	B	Carbohydrate, Protein, Lipid, Minerals
	C	Protein, Lipid, Minerals, Nucleic acid	D	Carbohydrate, metabolite, minerals
32	Enzymes are normally functional at a temperature of			
	A	50-60° C	B	70-75° C
	C	65-70 ° C	D	40-50° C
33	Coral reefs are made up of			
	A	CaNO ₃	B	CaPO ₄
	C	Ca(OH) ₂	D	CaCO ₃
34	Tocopherol is also known as			
	A	Vitamin A	B	Vitamin E
	C	Vitamin K	D	Vitamin D
35	Vitamin B ₁₂ is a			
	A	Fat soluble	B	Water Soluble
	C	Water insoluble	D	Neutral
36	Rickets is a disorder caused by a lack of			
	A	Vitamin A	B	Vitamin B
	C	Vitamin D	D	Vitamin E
37	The building blocks of DNA are			
	A	Nucleoside	B	Nucleosome
	C	Nucleic acid	D	Nucleotide
38	Cellulase are an enzyme which breaks down			
	A	Starch	B	Cellulose
	C	Lignin	D	Hemicellulose
39	Xylose is			
	A	Three carbon sugar	B	Four carbon sugar
	C	Five carbon sugar	D	Six carbon sugar
40	Porphyrin obtained from <i>Porphyra</i> is an example of			
	A	Neutral monosaccharide	B	Neutral polysaccharide
	C	Sulfated polysaccharide	D	Sulfated monosaccharide
41	Steroids are			

	A	Carbohydrate	B	Protein
	C	Metabolites	D	Lipid
42	Teichoic acid is present in the cell wall of			
	A	Gram negative bacteria	B	Gram positive bacteria
	C	Fungi	D	Yeast
43	Fish processing industry are major source of			
	A	Lipid	B	Antimicrobial peptides
	C	Disaccharide	D	Collagen
44	The structural and fundamental unit of life is			
	A	DNA	B	Cell
	C	RNA	D	Protein
45	$6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$ is a process of			
	A	Replication	B	Photosynthesis
	C	Fermentation	D	Respiration
46	Methane is the main constituent of			
	A	Biohydrogen	B	Biodiesel
	C	Biogas	D	Biooil
47	CPCB (Central Pollution Control Board) has its head office in			
	A	New Delhi	B	Mumbai
	C	Chennai	D	Kolkata
48	The emerging man-made marine pollutants is			
	A	Oil	B	Pesticide
	C	Herbicide	D	Microplastic
49	The tricarboxylic acid cycle is also known as			
	A	Nitric acid cycle	B	Citric acid cycle
	C	Phosphoric acid cycle	D	Carbon cycle
50	The deepest zone of the ocean is known as			
	A	Abyssal zone	B	Hadalpelagic zone
	C	Mesopelagic zone	D	Epipelagic zone
51	An enzyme is.....in nature			
	A	Lipid	B	Carbohydrate
	C	Protein	D	Nucleic acid
52	3,5-Dinitrosalicylic acid is used extensively in biochemistry for the estimation of			
	A	Non reducing sugars	B	Reducing sugars
	C	Polysaccharides	D	Oligosaccharides
53	..... refers to the accumulation of toxic chemicals with increasing trophic levels in the food chain			
	A	Biomining	B	Biofortification
	C	Biomagnification	D	Biofiltration
54	Lichen is a symbiotic association between algae and			
	A	Bacteria	B	Fungi
	C	Yeast	D	Cyanobacteria
55	AKTA™ is used for the purification of			
	A	Carbohydrate	B	Protein

	C	Lipid	D	Minerals
56	..... constitute a major fraction of elements in sea water			
	A	Carbonate	B	Chloride
	C	Calcium	D	Sulphur
57	NBA stands for			
	A	National botanical act	B	National bird act
	C	National biological act	D	National biodiversity act
58	..... sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem			
	A	Circular economy	B	Blue economy
	C	White economy	D	Purple economy
59	Which state is the largest producer of shrimp in India?			
	A	Tamil Nadu	B	Gujarat
	C	Andhra Pradesh	D	Maharashtra
60	Central Marine Fisheries Research Institute comes under			
	A	ICAR	B	CSIR
	C	ICMR	D	IARI
61	Which type of restriction endonucleases are generally used in genetic engineering?			
	A	Type I	B	Type II
	C	Type III	D	Type IV
62	Macrolactin A is isolated from			
	A	Marine bacteria	B	Marine fungi
	C	Marine fishes	D	Sponges
63	<i>Gonyaulax</i> is generally known to form			
	A	Green tide	B	Red tide
	C	Biofilm	D	Brown tide
64	Which of the following is not a coastal state of India?			
	A	Gujarat	B	Rajasthan
	C	Kerala	D	Tamil Nadu
65	What is RV Sindhu Sankalp?			
	A	Multi-disciplinary research vessel	B	Marine diversity of India Handbook
	C	Marine Park	D	Indian Navy ship
66	The first Biosafety level-3 (BSL-3) containment Mobile Laboratory of South Asia was inaugurated in			
	A	Mumbai	B	Pune
	C	Nashik	D	Nagpur
67	Which among the following is a purine?			
	A	Uracil	B	Cytosine
	C	Thymine	D	Adenine
68	TRL stands for			
	A	Technology readiness level	B	Technology relative level
	C	Technology reliable level	D	Technology research lab
69	The first transgenic plant introduced for commercial use was			

	A	Bt cotton	B	Corn
	C	Golden rice	D	Tobacco
70	In biochemistry, the extraction of energy from carbohydrates in the absence of oxygen is known as			
	A	Respiration	B	Glycolysis
	C	Fermentation	D	Pyrolysis
71	Agarose used in gel electrophoresis is derived from			
	A	Microalgae	B	Macroalgae
	C	Bacteria	D	Yeast
72	Extracellular Polymeric Substances of matrix consists of exopolysaccharides, proteins and nucleic acids			
	A	cyanobacteria	B	biofilm
	C	zooplankton	D	sponge
73	The first human hormone product through rDNA technology was			
	A	Adrenaline	B	Testosterone
	C	Insulin	D	Melatonin
74	..... are the foundation of the aquatic food web.			
	A	Crab	B	Phytoplankton
	C	Frog	D	Fish
75	Seawater has salinity around			
	A	25 ppt	B	30 ppt
	C	35 ppt	D	40 ppt
76	Diatoms are unicellular			
	A	Prokaryote	B	Fungi
	C	Virus	D	Eukaryote
77	The % of the earth's water found in ocean is			
	A	93	B	95
	C	97	D	99
78	Antibiotics are generally form in			
	A	Lag phase	B	Log phase
	C	Stationary phase	D	Decline phase
79	Turbidostat is a type of			
	A	Closed bioreactor	B	Continuous bioreactor
	C	Batch fermentation	D	Fed-batch fermentation
80	..... act as biological catalysts by accelerating chemical reactions.			
	A	Oligosaccharides	B	RNA
	C	DNA	D	Enzymes
81	In 1879, Charles Chamberland invented			
	A	Autoclave	B	Oven
	C	Incubator	D	Shaker
82	Chemolithotrophs are abundantly found in			
	A	Mining ore	B	Industrial effluent
	C	Electronic waste	D	Hydrothermal vents
83	Doubling time of <i>E. coli</i> is			
	A	17 minutes	B	20 minutes

	C	23 minutes	D	25 minutes
84	Fucoxanthin is the pigment found in			
	A	Red seaweed	B	Green seaweed
	C	Brown seaweed	D	Phytoplankton
85	Zero liquid discharge (ZLD) is			
	A	Wastewater management strategy	B	Plastic waste management strategy
	C	Agricultural runoff management strategy	D	Medical waste management
86	Genome of thermophiles have			
	A	Higher AT	B	Lower AT
	C	Higher GC	D	Lower GC
87	Land based cultivation is a good technique for cultivation of			
	A	Fish & seaweed	B	Fish & diatom
	C	Seaweed & diatom	D	Seaweed & yeast
88	Coral reefs are formed by			
	A	Phytoplankton	B	Polyps
	C	Microalgae	D	Macroalgae
89	pH of the seawater is			
	A	6.1	B	7.1
	C	8.2	D	9.1
90	Alang, a shipbreaking yard is situated in			
	A	Maharashtra	B	Goa
	C	Gujarat	D	Tamil Nadu
91	Baker's yeast is also known as			
	A	<i>Candida albicans</i>	B	<i>Zymomonas mobilis</i>
	C	<i>Pichia stipitis</i>	D	<i>Saccharomyces cerevisiae</i>
92	In genetic mapping RFLP stands for			
	A	Rapid fragment length polymorphism	B	Amplified fragment length polymorphism
	C	Random fragment length polymorphism	D	Restriction fragment length polymorphism
93	The formation of ethanol in fermentation broth can be analysed using			
	A	TGA	B	GCMS
	C	DSC	D	XRD
94	The best method to analyse polysaccharide composition is			
	A	UPLC	B	FPLC
	C	MALDI TOF MS	D	TLC
95	The phenomenon of coastal eutrophication is due to excessive			
	A	Nitrogen, Sulphate	B	Nitrogen, Magnesium
	C	Nitrogen, Phosphorous	D	Nitrogen, Calcium
96	HIMADRI 'the abode of snow' is the scientific base station located at			
	A	Arctic	B	Antarctica
	C	Iceland	D	Southern Ocean
97	Organisms adapted to grow in the crevices of the rock are			

	A	Halophiles	B	Endolith
	C	Thermophiles	D	Psychrophiles
98	Ocean Acidification is a phenomenon which is linked to level of			
	A	CO ₂	B	O ₂
	C	N ₂	D	NO ₂
99	..... ecosystems are characterized by moderate salinity level, falling that of freshwater and seawater.			
	A	Freshwater	B	Brackish water
	C	Marine water	D	Alkaline water
100	Organisms that obtain energy from sunlight are			
	A	Chemotrophs	B	Autotrophs
	C	Phototrophs	D	Organotrophs
101	GBU, GBRC, and GSBTM are governed by:			
	A	DST, Government of Gujarat	B	DST, Government of India
	C	DBT, Government of Gujarat	D	DBT, Government of India
102	Agar-agar is obtained from			
	A	Bacteria	B	Yeast
	C	Fungi	D	Macroalgae
103	The following is not an example of Extremophile			
	A	Psychrophiles	B	Alkaliphiles
	C	Mesophiles	D	Thermophiles
104	UNs has set sustainable development goals			
	A	15	B	16
	C	17	D	18
105	Kyoto Protocol is allied to:			
	A	Climate change concerning CO ₂ and greenhouse gas emission	B	Ocean acidification
	C	Water pollution	D	Global warming
106	India's 1 vaccine for COVID-19 is developed by			
	A	Alembic	B	Intas
	C	Sun Pharma	D	Bharat Biotech
107	Which of the following activity is not directly responsible for environmental degradation?			
	A	Urban development	B	Transportation
	C	Industrialization	D	Ocean acidification
108	IoT-based monitoring is called as			
	A	Onsite environmental monitoring	B	offsite environmental monitoring
	C	Hybrid environmental monitoring	D	Smart environmental monitoring
109	Which of the following is the biggest oil spill?			
	A	Deepwater Horizon	B	California oil spill
	C	Mauritius oil spill	D	Atlantic empress
110	..... authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on			

	environmental grounds			
	A	EPA act 1984	B	EPA act 1985
	C	EPA act 1986	D	EPA act 1987
111	The downstream process is a combination of			
	A	Extraction, separation, and purification of the product	B	Separation, extraction, and purification of the product
	C	Separation and purification of bioproduct	D	Separation and extraction of the product
112	Production of peptides from protein is a part of the			
	A	Separation	B	Upstream
	C	Downstream	D	Purification
113	Which of the following methods is most likely to be quantitative			
	A	Gram staining	B	Streak plate
	C	Dilution and plating	D	Lyophilization
114	A proof of concept for enzyme production established in academic institute has been taken up by the industry for scale-up studies, it falls under which TRL category:			
	A	TRL 1-3	B	TRL 4-6
	C	TRL 6-9	D	TRL 10-12
115	In setting up a marine-based product facility, If the number of steps in the downstream process is more than:			
	A	CAPEX will be high	B	OPEX will be high
	C	CAPEX will be low	D	OPEX will be low
116	The best effective method to purify protein is:			
	A	NMR	B	GCMS
	C	Ion exchange chromatography	D	Dialysis
117	Characteristic color of Red Sea is due to			
	A	Chlorella	B	Spirulina
	C	Microcystis	D	Oscillatoria erythraea
118	Planktons are			
	A	Limnos	B	Benthic microbes
	C	Floating and drifting microbes	D	Blue green algae
119	<i>Clostridium oceanicum</i> is found in			
	A	Polluted oceans	B	Freshwater ponds
	C	River	D	Freshwater lakes
120	Which bacteria could survive in extreme conditions			
	A	<i>Archaeobacteria</i>	B	<i>E. coli</i>
	C	<i>Bacillus subtilis</i>	D	<i>Staphylococcus</i>
121	<i>Pseudomonas putida</i> is responsible for			
	A	clearing the pesticides	B	clearing the wastewater
	C	clearing the microplastic	D	clearing the oil spills
122	Methanogens are			
	A	anaerobic archaea producing methane	B	aerobic archaea producing methane
	C	anaerobic algae producing methane	D	anaerobic algae producing

				methane
123	An extremophile that thrives in high salt concentrations is known as			
	A	Barophile	B	Halophile
	C	Thermophile	D	Alkaliphile
124	A long-term biological interaction in which members of one species gain benefits while those of the other species neither benefit nor are harmed			
	A	Parasitism	B	Symbiosis
	C	Commensalism	D	Mutualism
125	..... abundant in the extremely hot water erupting from hydrothermal vents			
	A	CH ₄	B	H ₂ S
	C	N ₂ O	D	O ₂
126	Microorganisms present in hydrothermal vents have distinct metabolism including			
	A	Chemosynthesis	B	Heterotrophic
	C	Photosynthesis	D	Fermentation
127	Which water body surrounds India in the west			
	A	Gulf of Cambay	B	Bay of Bangal
	C	Pacific ocean	D	Arabian sea
128	The great barrier reef is located at the coast of			
	A	New Zealand	B	England
	C	Srilanka	D	Australia
129	The deepest marine zone is			
	A	Abyssopelagic zone	B	Benthic zone
	C	Epipelagic zone	D	Mesopelagic zone
130	Formation of algal bloom takes place due to the excessive presence of			
	A	Nitrogen & Potassium	B	Phosphorus & Potassium
	C	Ammonia & Nitrogen	D	Nitrogen & Phosphorus
131	..... is a marine diatom rich in EPA			
	A	<i>Chlorella vulgaris</i>	B	<i>Odontella aurita</i>
	C	<i>Duanilla salina</i>	D	<i>Karenia brevis</i>
132	IMTA stands for			
	A	Integrated multi-trophic aquaculture	B	Integrated multi-level aquaculture
	C	Internal multi-trophic aquaculture	D	International multi-trophic aquaculture
133	Aqueous extracts of marine bioactive compounds can be concentrated using			
	A	Centrifugation	B	Cryopreservation
	C	Boiling	D	Lyophilization
134	Which statement is not correct for microalgae?			
	A	effectively treat wastewater	B	source of bioactive component
	C	requires agricultural lands for growth	D	source of biofuels
135	The predominant species of mangrove found in Gujarat is			
	A	<i>Chlorella vulgaris</i>	B	<i>Sonneratia illicifolius</i>
	C	<i>Acanthus apetala</i>	D	<i>Avicennia marina</i>

136	..... are a group of trees and shrubs that live in the coastal intertidal zone			
	A	Microalgae	B	Mangroves
	C	Seaweed	D	Diatom
137	Sundarbans is a mangrove area in the delta formed by the confluence of the			
	A	Ganges, Brahmaputra and Yamuna Rivers in the Bay of Bengal	B	Ganges, Brahmaputra and Narmada Rivers in the Bay of Bengal
	C	Ganges, Brahmaputra and Kaveri Rivers in the Bay of Bengal	D	Ganges, Brahmaputra and Meghna Rivers in the Bay of Bengal
138	The largest mangrove forest in the world is			
	A	Bruguiera	B	Ceriops
	C	Red mangroves	D	Sundarbans
139	..... is the largest ecosystem of the earth			
	A	Mesosphere	B	Biosphere
	C	Lithosphere	D	Hydrosphere
140	Phytochemicals are derived from			
	A	Bacteria	B	Yeast
	C	Fungi	D	Plant
141	Toxic products in microbial growth curve accumulate in			
	A	Lag phase	B	Log phase
	C	Stationary phase	D	Decline phase
142	Lithotrophs obtain their energy from			
	A	Organic compound	B	Inorganic compound
	C	Chemicals	D	Sunlight
143	..... is the largest and deepest of the world ocean basins			
	A	Atlantic Ocean	B	Pacific Ocean
	C	Indian ocean	D	Arctic ocean
144	The coastline of India is approximately			
	A	7000 km	B	7500 km
	C	8000 km	D	8500 km
145	Which of the following is non-biodegradable			
	A	bioplastic	B	cellulose
	C	nylon	D	starch
146	Which of the following is a terrestrial habitat			
	A	Rainforest	B	Pond
	C	River	D	Lake
147	Which of the following is not a gaseous biogeochemical cycle			
	A	Hydrogen cycle	B	Nitrogen cycle
	C	Oxygen cycle	D	Phosphorus cycle
148	Marine biotechnology is related to			
	A	Blue biotechnology	B	White biotechnology
	C	Green biotechnology	D	Red biotechnology
149	Benthos are the marine organisms that live in			
	A	Upper region	B	Middle region

	C	Bottom region	D	Pelagic region
150	Cyanobacteria and eukaryotic algae are the producer in marine ecosystem			
	A	Primary	B	secondary
	C	tertiary	D	quaternary
151	The father of biodiversity is			
	A	Edward O. Wilson	B	Robert Swanson
	C	Eva Ekeblad	D	Wilhelm Roux
152	Oceanography is the			
	A	Study of chemical, physical and biological features of ocean	B	Study of chemical and physical features of ocean
	C	Study of physical and biological features of ocean	D	Study of chemical and biological features of ocean
153	The National Institute of Oceanography is set up by			
	A	DBT	B	DST
	C	ICAR	D	CSIR
154	The only CSIR institute situated in Gujarat is			
	A	Central salt and marine chemistry research institute	B	Central salt and marine chemicals research institute
	C	Central salt and marine chemicals research industry	D	Centre for salt and marine chemicals research institute
155	AquAgri Processing Private Limited is known for			
	A	Plant-based protein	B	Algal based lipid
	C	Seaweed-derived organic products	D	Seaweed derived fuels
156	World Ocean Day is celebrated on:			
	A	5 th June	B	6 th June
	C	7 th June	D	8 th June
157	Gujarat has a coastal line of around			
	A	1400 km	B	1600 km
	C	1800 km	D	2000 km
158	The study of fungi is known as			
	A	Phycology	B	Mycology
	C	Virology	D	Pathology
159	Third-generation biofuels are derived from			
	A	Bacteria	B	Fungi
	C	Algae	D	Sugarcane
160	Laminarin is an example of			
	A	Protein	B	Carbohydrate
	C	Vitamin	D	Minerals
161	The presence of sulphated polysaccharides is a characteristic of			
	A	Diatom	B	Phytoplankton
	C	microalgae	D	macroalgae
162	Carotenoid is			
	A	Carbohydrate	B	Pigment
	C	Enzyme	D	Fat

163	Prebiotics are			
	A	High-fibre-rich food	B	High fibre-rich protein
	C	High fiber-rich lipid	D	High fibre rich minerals
164	How many nitrogen atoms are present in thymine			
	A	1	B	2
	C	3	D	4
165	The most common growth media to culture marine microbes is			
	A	Nutrient agar	B	LB agar
	C	Zobell marine agar	D	YEPA agar
166	EPA stands for			
	A	Environment promotion act	B	Environment protection act
	C	Environment public act	D	Environment pollution act
167	The nitrogenous waste of crustaceans is rich in			
	A	Urea	B	Uric acid
	C	Nitrate	D	Ammonia
168	..... are known to be the oldest living organism on the earth			
	A	Archaeobacteria	B	Halobacteria
	C	Cyanobacteria	D	Pseudobacter
169	Brackish water ecosystem can be seen in			
	A	stream	B	wetland
	C	river	D	delta
170	Salt marshes and mangrove swamps are example of			
	A	Fresh water ecosystem	B	Brackish water ecosystem
	C	Sea water ecosystem	D	Pond water ecosystem
171	.....is the largest ecosystem of			
	A	River ecosystem	B	Ocean ecosystem
	C	Forest ecosystem	D	Lake ecosystem
172	An ecosystem is a			
	A	Structural unit of nature	B	Functional unit of nature
	C	Structural and functional unit of nature	D	Biotic unit of nature
173	The energy source that supports the life of bacteria thriving around the deep sea hydrothermal vents is:			
	A	Seawater	B	Light
	C	H ₂ S	D	CH ₄
174	Finfish and shellfish are a good source of			
	A	carbohydrate	B	protein
	C	minerals	D	Dietary fibers
175	An example of a non-renewable source found in marine environments is:			
	A	Seaweed	B	Fish
	C	Plankton	D	Oil
176	The exclusive economic zone (EEZ) of a nation is equal to approximately			
	A	200 nautical miles	B	250 nautical miles
	C	300 nautical miles	D	350 nautical miles

177	Krill, which are small shrimp-like crustaceans, are primarily found in the cold waters of			
	A	Arabian sea	B	Antarctica
	C	Pacific Ocean	D	Indian Ocean
178	An example of a community is			
	A	An individual giant kelp	B	A kelp forest and physical factors affecting it
	C	A kelp forest and organisms living in it	D	A group of giant kelps
179	The species which is at the highest risk of extinction in near future is			
	A	Critically endangered	B	Rare
	C	Vulnerable	D	Distinct
180	In food chain, herbivores are			
	A	Primary consumer	B	Secondary consumer
	C	Tertiary consumer	D	Secondary producer
181	The richest biodiversity hotspot is			
	A	Eastern ghat	B	Western ghat
	C	Eastern coast	D	Western coast
182	One horn rhinoceros is a conserved species at			
	A	Ranthambhor	B	Kaziranga national park
	C	Jim corbett national park	D	Kolkata national park
183	..... a linear sequence of organisms through which nutrients and energy pass as one organism eats another			
	A	Food chain	B	Food web
	C	Phosphorus cycle	D	Carbon cycle
184	..... is the natural interconnection of food chains and a graphical representation of what-eats-what in an ecological community			
	A	Nitrogen cycle	B	Food web
	C	Food chain	D	Food habitat
185	What is the most significant source of waste that causes marine pollution?			
	A	Industrial effluent	B	Climate condition
	C	Forest fires	D	landsliding
186	COD is generally then BOD			
	A	Lower	B	Higher
	C	Equal	D	3 folds
187	..... is an analytical parameter representing the amount of dissolved oxygen consumed by aerobic bacteria growing on the organic material present in a water sample at a specific temperature over a specific time period.			
	A	Biological chemical demand	B	Biochemical oxygen demand
	C	Chemical oxygen demand	D	Biological oxygen demand
188	A rapid test to indicate the level of water pollution intensity is			
	A	COD	B	BOD
	C	Dissolved oxygen	D	Salinity testing
189	Winkler method is generally used to detect			
	A	Dissolved oxygen	B	TDS

	C	pH	D	Mineral content
190	IoT stands for			
	A	Intranet of things	B	Internet of thing
	C	Interconnection of things	D	Interrelation of things
191	<i>Litopenaeus vannamei</i> is			
	A	fish	B	plankton
	C	shrimp	D	oyster
192	Marine biological resources are a rich source of			
	A	food	B	water
	C	oils	D	vitamin
193	The largest island in the Indian Ocean is			
	A	Andman and Nicobar	B	Lakshadweep
	C	Maldives	D	Madagascar
194	..... is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake			
	A	Tornado	B	Tsunami
	C	Cyclone	D	Typhoon
195	..... is a shower of organic material falling from upper waters to the deep ocean			
	A	Marine debris	B	Marine biome
	C	Marine snow	D	Marine ice
196	Thermophiles could be a good source of novel _____ in genetic engineering			
	A	Polysaccharide	B	Enzyme
	C	Lipid	D	Metabolites
197	Algal metabolites can be identified using			
	A	TGA	B	DSC
	C	GPC	D	LC-MS/MS
198	Presence of silica is a characteristic of			
	A	Macroalgae	B	Oyster
	C	Diatom	D	Shrimp
199	The headquarter of the Indian Patent Office is in			
	A	Ahmedabad	B	Jaipur
	C	Mumbai	D	Goa
200	India has coastal states			
	A	8	B	9
	C	10	D	11

----- Space for Rough Work -----
