### Module Name : PhD Marine Biology-E Exam Date : 18-Sep-2020 Batch : 16:00-18:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negativ Marks
bjec	tive Question			
	1	Ozone layer is found in the	4.0	1.00
		A1 Troposphere		
		:		
		A2 : Stratosphere		
		:		
		A3 : Mesosphere		
		A4 : Thermosphere		
1	time On the first of the first			
бјес	tive Question	A norman half of stand with half the next in the sum of the second second second	4.0	1.00
	2	A narrow belt of strong winds which move in the upper troposphere is	4.0	1.00
		A 1		
		A1 : Jet stream		
		A2		
		A2 : Westerlies		
		A3 Trade winds		
		:		
		A4 Polar easterlies		
biect	tive Question			
ojee	3	Black smokers in hydrothermal vents release	4.0	1.00
		A1		
		A1 Ash into the ocean		
		A2 Gases into the ocean		
		:		
		A3 Minerals into the ocean		
		A4 : Dry ice into the ocean		
	tive Question			
biect		The area between two breaker zones is called	4.0	1.00
bjec	4	The area octricent two oreared zones is caned	11	11
bjec				
bjec				
ojec		A1 Surf		

		A2 : Breaker		
		A3 Undertow		
		<sup>A4</sup> Long shore		
Object	tive Question			
5	5	As the depth increases the wave energy	4.0	1.00
		A1 : Increases		

0	bject	ive Question			
6		6	The relation of moon with tides was first discovered by	4.0	1.00
			A1 Pytheas		
			A2 : Zeus		
			A3 Protheus		
			A4 Pythagoras		

A2 : Decreases

A3 Constant

A4 Simultaneous

7	Neap tides occur when the earth, sun and moon form an angle of	4.0	1.00
	A1 60 °		
	A2 90 °		
	A3 20 °		
	A4 : 180 °		

Objective Question

8

	: A2 Avicenna : A3 Halodules : A4 Cymodeca		
Objective Question		1.0	1.00

Object	ive Question			
9	9	Rising levels of atmospheric carbon dioxide will cause	4.0	1.00
		A1 Decreased pH		
		A2 Increased precipitation of calcium carbonate		
		A3 Decreased salinity		
		A4 Increased salinity		
bject	ive Question			
0	10	Calcium carbonate oozes may be the dominant sediment type:	4.0	1.00
		A1 on the abyssal plains		
		A2 below surface waters that have high diatom populations		
		A3 only above the carbonate compensation depth (CCD)		

A4 mainly below surface waters that are low in nutrients

11	11	The ocean with all longitudes	4.0	1.00
		A1 Pacific		
		A2 Atlantic		
		A3 Indian		
		A4 Southern		
Dbje	ctive Question	<u>I</u>		
2	12	High BOD indicates	4.0	1.00

	A1 Less polluted water :	
	A2 : Less number of organisms	
	A3 More polluted water	
	A4 High Saline water :	
Objective Question		

Object	tive Question			
3	13	Keystone species are	4.0	1.00
		Al Preys heavily on a particular species		
		A2 Is especially vulnerable to extinction		
		A3 Is restricted to small geographic area		
		A4 Crucial role in functioning of an ecological community		
Dbject	tive Question			
14	14	If more than single species of fish is cultured at a time, then it is called	4.0	1.00
		Al Polyculture		
		A2 Mariculture		
		A3 Monoculture		
		A4 : Aquaculture		
Dhiect	tive Question			
.5	15	Bony armor fishes are:	4.0	1.00
		Al Ostracoderms :		
		A2 Elasmobranchs		

A4 None of these

4.0	1.00
4.0	1.00
4.0	1.00
4.0	1.00
4.0	1.00

	tive Question		1.0	1.00
0	20	Sponges feed by means of	4.0	1.00
		A1 Currents formed by amoebocyte cells		
		A2 Currents generated by muscular contraction		
		A3 : Currents formed by collar cells		
		A4 p ( ) b (		
		A4 External water currents only		
	tive Question			
1	21	SONAR is the short forms of	4.0	1.00
		A1 Sound Navigation Ranging		
		A2 Sound Nautical Reference		
		A3 Salinity measuring device		
		A4 : Net used for sampling		
		:		
Dbjec 2	tive Question		4.0	1.00
2	22	Carbolic acid is	4.0	1.00
		A1		
		A1 : Phenol		
		A2 Benzene		
		A3 Phenyl acetate		
		A4 : Alcohol		
bjec 3	tive Question	Seawater salinity is measured using	4.0	1.00
		Seawater sammy is incasured using		
		Al III. dramatar Sat		
		A1 Hydrometer Set		
		A2 : Knudsen Titration		
		A3		
		A3 Salinometer		
			II	

	A4 Spectrometer		
	Question		
24 24	Euryhaline	4.0	1.00
	A1 Low salinity tolerance		
	A2 High salinity tolerance		
	A3 Tolerance of wide variations of salinity		
	A4 None of these		
Objective	Question		
25 25		4.0	1.00
	A1 Nutrient deficient water to the surface		
	A2 Nutrient rich water from the bottom		
	A3 River run of		
	A4 : Hyper saline waters		
Objective	Question		
26 26		4.0	1.00
	Al Riftia		
	A2 Balonoglossus		
	A3 Trochopore larvae		
	A4 : Artemia		
Objective	Question		
27 27		4.0	1.00
	Al Polar		
	A2 Maitri		

	A3 NCOAR	
	A4 NIO	

Objec	live Question			
28	28	Highest standing crop of seaweeds in India	4.0	1.00
		A1 : Gujarat		
		A2 : Tamil Nadu		
		A3 : Maharashtra		
		A4 Orissa		

	···· •			
29	29	India has got an EEZ of	4.0	1.00
		A1 2.02 m sq.km		
		A2 2.05 m sq.km		
		A3 2.0 m sq.km		
		A4 : 2.1 m sq. km		

Objec	tive Question			
30	30	The larvae of lobster is known as	4.0	1.00
		Al Zoea		
		A2 Mysis		
		A3 Phyllosoma		
		A4 Nauplius :		
Objec	tive Question			
31	31	Sciaenid's have well developed	4.0	1.00
		A1 Pyloric caeca		
		A2 Stomach		

		A3 Gills		
		A4 Swim bladder		
	tive Question		4.0	1.00
32	32	Winds which blow from east to west within angle of 60° and 90° are the	4.0	1.00
		A1 Westerlies		
		A2 : :		
		A3 Polar easterlies		
		A4 : Coriolis effect		
Objec	tive Question			
3	33	Information in GIS is entered and stored as	4.0	1.00
		Al Panels		
		A2 : Lyers		
		A3 Single panel		
		A4 : Dual-panel		
Dbiec	tive Question			
4	34	The Gulf stream carries water currents which are comparatively	4.0	1.00
		Al Colder		
		A2 Warmer		
		A3 Hottest		
		A4 Coldest		
	tive Question			
5	35	Speed of sound in water is around	4.0	1.00
		A1 2200 m/s		

				11
		A2 8100 m/s		
		A3 1500 m/s		
		A4 5100 m/s		
biect	tive Question			
5	36	The element which is found in the deep ocean	4.0	1.00
		Al Cobalt		
		A2 : Iron		
		A3 : Manganese		
		A4 Copper		
Dbiect	tive Question			
7	37	Landsat program began in	4.0	1.00
		A1 1972		
		A2 2003		
		A3 1973		
		A4 1937 :		
Dbiect	tive Question			
8	38	A sapropel is:	4.0	1.00
		A1 Unicellular algae		
		A2 Submarine avalanche		
		A3 : Sedimentary deposit		
		A4 : Ocean current		
Dbiect	tive Question			
	39	Large scale Algal blooms can be observed by	4.0	1.00

		A1 Submersible		
		A2 Satellite imagery		
		A <sup>3</sup> SCUBA		
		<sup>A4</sup> SONAR		
01.1				
Објес 40	tive Question	Dedictories Ocean connect doubte of	4.0	1.00
40	40	Radiolarian Oozes occur at depths of	4.0	1.00
		A1 : 100 to 300 m		
		A2 500 to 1000 m		
		A3 1000 to 2000 m		
		A4 2000 to 5000 m		
Obiec	tive Question			
41	41	Benthic region where light does not penetrate	4.0	1.00
		Al Neritic zone		
		A2 : Abyssal Zone		
		A3 : Littoral zone		
		A4 : Inter tidal zone		
01.				
Objec 42	tive Question	Ecosystems with the lowest net primary production per square meter?	4.0	1.00
12	12	Ecosystems with the lowest net primary production per square meter?	1.0	1.00
		A1 Salt Marsh		
		A2 Open Ocean		
		A3 : Coral reef		
		A4 Mangrove		
		A4 Mangrove		
		: Mangrove		

43	43	"One population is benefited but the other is not affected" is called as	4.0	1.00
		A1 Ammensalism		
		A2 Commensalism		
		A3 Symbiosis		
		A4 Parasitism :		
Object	tive Question			
44	44	Induced breeding technique is used in	4.0	1.00
		A1 Culture fishery		
		A2 : Marine fishery		
		A3 Capture fishery		
		A4 Inland fishery		
Object	tive Question			
Објес 45	45	Smoking is used as a technique of	4.0	1.00
-15	-15	Smoking is used as a technique of	1.0	1.00
		A1 Fish preservation		
		A2 Crop harvesting		
		A3 Crystallization of sugar		
		A4 Mushroom cultivation		
01				
Object 46	tive Question		4.0	1.00
40	40	Animals that float in the surface of the sea are called as	4.0	1.00
		A1 Plankton :		
		A2 : Krypton		
		A3 Neuston		
		A4 Epifauna		

	tive Question			
47	47	Elements considered as trace elements in seawater	4.0	1.00
		A1 Chlorine and potassium		
		A2 Sodium and aluminum		
		A3 Iron and strontium		
		A4 Sodium and chlorine		
Dbiec	tive Question			
48	48	A blood pigment containing copper is	4.0	1.00
		A1 Hemerythrin		
		A2 Hemoglobin		
		A3 Hemocyanin		
		A4 Chlorocruorin		
Obiec	tive Question			
49	49	Fish that spawn in fresh water but feed in continental shelf waters are	4.0	1.00
		A1 Catadromous :		
		A2 Polytomous		
		A3 Lecithotrophic		
		A4 Anadromous		
Obiec	tive Question			
50	50	All arthropods show	4.0	1.00
		A1 A calcified internal skeleton		
		A2 A calcified external skeleton		
		A3 An external skeleton composed of chitin		

		A4 A strictly marine habitat		
	tive Question			
51	51	Vestimentiferans can live without a gut because	4.0	1.00
		A1 They live near sources of dissolved organic matter		
		A2 They are parasites living within the guts of bivalves		
		A3 They have symbiotic bacteria, source of their nutrition		
		A4 They are protistans		
Object	tive Question			
52	52	Most valuable mineral resources taken from the sea floor	4.0	1.00
		A1 Petroleum		
		A2 : Radiolarian		
		A3 Manganese		
		A4 Calcium		
Obiect	tive Question			
	53	Euphausiids are seen in	4.0	1.00
		A1 Salt Lake		
		A2 Red sea		
		A3 Mediterranean Sea		
		A4 Southern oceans		
Object	tive Question			
54	54	In Stomatopoda gills are present at the base of	4.0	1.00
		A1 Thorax		
		A2 Abdomen		
		A3 Mouth		

		A4		
		A4 Pleopods		
Object	ctive Question			
	55	Larva of squilla is known as	4.0	1.00
		A1 Alima :		
		A2 Megalopa		
		A3 : Nauplius		
		A4 Veliger		
Object	ctive Question			
	56	Portuguese man of war is	4.0	1.00
		A1 Obelia		
		A2 : Aurelia		
		A3 Physalia		
		A4 Hydra		
Ohiect	ctive Question			
57	57	Pilidium larva is found in the members of phylum	4.0	1.00
		A1 Brachiopoda :		
		A2 Nemotoda		
		A3 Nemertea		
		A4 Bryozoa :		
Object	ctive Question			
	58	Brachiopods are also called as	4.0	1.00
		A1 Tunicates		
		A2 Lamp shells		

		A3 Lancelets		
		A4 Arrow worms		
Obiec	tive Question			
59	59	Statocyst is a sense organ present in	4.0	1.00
		A1 Paramecium		
		A2 Ascaris		
		A3 Polyp		
		A4 Medusa of Obelia		
	tive Question		4.0	1.00
60	60	Metridium is commonly called as	4.0	1.00
		Al Sea fan		
		A2 : Fire worm		
		A3 Sea anemone		
		A4 Sea pen		
Obiec	tive Question			
61	61	Comb jellies are	4.0	1.00
		A1 Ctenophores		
		A2 : Cnidarians		
		A3 Scyphozoa		
		A4 Turbellarians :		
Obiec	tive Question			
62	62	Radula are found in all mollusks except	4.0	1.00
		A1 Cephalopods		

		A2 Bivalves		
		A3 Aplacophora		
		A4 Scaphopods		
	tive Question			
63	63	Respiratory organs in sea cucumbers are	4.0	1.00
		A1 Bursae		
		A2 : Trocheae		
		A3 Dermal branchia		
		A4 Respiratory tree		
Object	tive Question			
64	64	The marine Iguana is	4.0	1.00
		A1 A connecting link between amphibian and reptiles		
		A2 Endangered		
		A3 An amphibian		
		A4 A mammal		
Object	tive Question			
65	65	Sea birds are	4.0	1.00
		A1 Homeothermic animals		
		A2 Cold-blooded animals		
		A3 Nocturnal animals		
		A4 Viviparous :		
Object	tive Question			
66	66	The taxonomic order Cetacea include	4.0	1.00
		A1 Seals, Dolphins and Whales		

		<ul> <li>A2 Seals, sea lions and walruses</li> <li>A3 Whales, Manatees and Dugongs</li> <li>A4 Whales, Dolphins and Porpoises</li> </ul>		
	ive Question			
67	67	Genetic code is said to be degenerate because	4.0	1.00
		A1 Codons degenerate very quickly		
		A2 : One amino acid is coded by more than one codon		
		A3 One codon codes for more than one amino acid		
		A4 : None of these		
Object	ive Question			
68	68	An organism with two similar alleles is	4.0	1.00
		A1 Dominant :		
		A2 : Hybrid		
		A3 Heterozygous		
		A4 : Homozygous		

Objec	ctive Question			
69	69	Genes located on same locus but having different expressions are	4.0	1.00
		A1 Multiple alleles :		
		A2 Oncogenes		
		A3 Polygenes		
		A4 Codominant :		
Objec	ctive Question			
70	70	The cell walls of fungi are made up of	4.0	1.00

	A1 Cellulose	
	A2 Chitin	
	A3 Pectin	
	A4 Proteins and lipids	
Objective Ouestion		

	ive Question			
71	71	Choanocytes are unique to	4.0	1.00
		A1 Protozoa		
		A2 Porifera		
		A3 Mollusca		
		A4 Echinodermata		
Object	ive Question			
72	72		4.0	1.00
12	12	Bacteria that grows well at 0°C with optimum temperature of 15°C or lower are	т.U	1.00
		Al Psychrophile :		
		A2 : Acidophile		
		A3 Psychrotroph		
		A4 : Thermophile		
Object	ive Question			
73	73	When a bacteriophage is integrated into a cellular genome it is called a	4.0	1.00
	-	when a bacteriophage is integrated into a central genome it is cance a		
		A1 Virulent virus		
		A2 : Lytic virus		
		A3 Prophage		

A4 Transducing virus

	ve Question		4.0	1.00
4 7	74	Net primary productivity is lesser than the gross primary productivity means	4.0	1.00
		A1 That is consumed by herbivores		
		42		
		A2 That is consumed by the producer in metabolism		
		A3 ~		
		A3 Secondary productivity		
		A4 Loss due to mortality		
		:		
	ve Question			
5 7	75	Photoperiodism	4.0	1.00
		A1 Is a plant's response to the direction of light		
		A2 : Is a plant's response to the absence of light		
		43		
		A3 Is a plant's response to a change in the amount of light		
		A4 Is a plant's response to presence of light		
		is a plant's response to presence of light		
bjectiv	ve Question			
5 7	76	Percentage of the incident solar energy plants harvest during photosynthesis	4.0	1.00
		A1 1-2%		
		A2 5-10%		
		4.2		
		A3 10-20%		
		A4 ap 700/		
		A4 20-50%		
bjectiv	ve Question			
	77	Biological characteristic not commonly found in invasive species?	4.0	1.00
7 7				
7		A1		
7		A <sup>1</sup> Optimal local adaptation		
7 7		A1 Optimal local adaptation		
7 7		Control and the second		
7 7				
7 7		A1 Optimal local adaptation : A2 : High reproductive capacity		
7 7		A2 : High reproductive capacity		
7 7		A2 : High reproductive capacity		
7 7				
7		A2 : High reproductive capacity		

Objective Qu '8 78	Over 90% of all species that have ever existed are extinct today are	4.0	1.00
	A1 Evolution is inefficient		
	A2 Evolution does not take long term advantage into account		
	A3 Extinction is inevitable		
	A4 : A very long time has passed, since life began on earth		
Objective Qu 79 79	All of the following are considered weak interactions in proteins, except	4.0	1.00
	A1 : Hydrogen bond		
	A2 : Hydrophobic interactions		
	A3 Ionic bonds		
	A4 Peptide bonds		
Dbjective Qu			
80 80	Among the following which is biopolymer?	4.0	1.00
	A1 : Nucleic acid		
	A2 Polystyrene		
	A3 Polyethylene		
	A4 Nylon		
bjective Qu			
1 81	A nucleotide is	4.0	1.00
	$\frac{A1}{Base + sugar}$		
	A2 Base + phosphate :		
	A3 Sugar + phosphate		

1 1	
74	Base + sugar + phosphate
•	Babe bagai phosphare

Objec	tive Question			
82	82	In some viruses RNA is present instead of DNA indicating that	4.0	1.00
		A1 Their nucleic acid must combine with host DNA before replication		
		A2 : They cannot replicate		
		A3 There is no hereditary information		
		A4 RNA can act as genetic material		

83	83	Which of the following is not a lipid?	4.0	1.00
		A1 Chitin		
		A2 : Terpenes		
		A3 Steroids		
		A4 Prostaglandins		

Object	bjective Question				
84	84	The most common polyunsaturated fatty acid in foods?	4.0	1.00	
		A1 Oleic acid			
		A2 : Stearic acid			
		A3 : Linoleic acid			
		A4 Eladic acid			
Object	ive Question				
85	85	Enzymes speed up biochemical reactions by	4.0	1.00	
		A1 Increasing the activation energy of the reaction			
		A2 Lowering the activation energy of the reaction :			

A3 Increasing the temperature of the reaction :

 $\stackrel{A4}{:}$  Lowering the temperature of the reaction :

6	86	The energy required to initiate a chemical reaction is called	4.0	1.00
		Al Activation energy		
		A2 : :		
		A3 Catalysis		
		A4 Primary energy :		

### Objective Question

87	87	Prolonged deficiency of nicotinic acid produced	4.0	1.00
		A1 Osteomalacia		
		A2 : Xerophthalmia		
		A3 Pellagra		
		A4 :		

Objectiv

Objec	tive Question			
88	88	In a lipid bilayer the lipids have	4.0	1.00
		A1 Their water repelling heads facing inward		
		A2 Their water repelling tails facing inward		
		A3 Their hydrogen bond forming heads facing inward		
		A4 Their hydrogen bond forming tails facing inward		
Objec	tive Question			
89	89	ATP is required in the transport of	4.0	1.00
		A1 Water molecules		
		A2 All molecules across a membrane		

		:		
		A3 Molecules to areas of lower concentrations		
		A4 Molecules to areas of higher concentration		
Objec	tive Question			
90	90	A nucleosome is made of	4.0	1.00
		A1 Histone wrapped over octameric core of nucleic acid		
		A2 Histone		
		A3 DNA wrapped over octameric core of histone		
		A4 DNA		
Objec	tive Question			
91	91	The process common to aerobic and anaerobic respiration is	4.0	1.00
		A1 Oxidation		
		A2 Glycolysis		
		A3 : Kreb's cycle		
		A4 Electron transport chain		
	tive Question			
92	92	The process of double fertilization is unique to	4.0	1.00
		A1 Angiosperm		
		A2 : Cycads		
		A3 Gymnosperms		
		A4 : Ginkos		
	tive Question			
93	93	The body plan common to both annelids and insects is	4.0	1.00
		A1 Acoelomate		

		A2 Pseudocoel		
		A3 Nervous System		
		A4 : Hemocoel		
bjeo	ctive Question			
4	94	Nature of genome in bacteria is	4.0	1.00
		A1 dsDNA		
		A2 : dsRNA		
		A3 ssDNA		
		A4 ssRNA :		
Objec	ctive Question			
95	95	The infectious substance of prions is	4.0	1.00
		A1 Protein		
		A2 : Glycophosphate		
		A3 RNA		
		A4 DNA :		
Objec	ctive Question			
96	96	In the formula for biotic potential $(dN/dt = rN)$ , what does N stand for?	4.0	1.00
		A1 The carrying capacity of the environment		
		A2 The change in time :		
		A3 : The number of individuals in the population		
		A4 The intrinsic rate of natural increase of the population :		
bie	ctive Question			
Juje	97	Pyramids that can never be inverted in a natural ecosystem?	4.0	1.00

	A1 Pyramid of numbers :	
	A2 Pyramid of energy	
	A3 Pyramid of biomass	
	A4 All can be inverted	
Objective Question		

98	98	Biomes have all of the characteristics listed below except	4.0	1.00
		A1 : :		
		A2 : Uniform habitats		
		A3 : A characteristic appearance		
		A4 A common climate		

99	99	The pigment plays a key role in photomorphogenesis is	4.0	1.00
		Al Chlorophyll		
		A2 Phytochrome		
		A3 : Cytochrome		
		A4 : Anthocyanin		

j	tive Question			
100	100	Which kingdom contains "extremophiles"?	4.0	1.00
		Al Eubacteria		
		A2 : Archebacteria		
		A3 Fungi		
		A4 Protista		