

Sr No.	MSc Ecology and Environmental Studies
1	Choose the missing term out of the given options: __aa__ba__bb__ab__aab
Alt1	aaabb
Alt2	babab
Alt3	bbaab
Alt4	bbbaa

2	Choose word from the given options which bears the same relationship to the third word, as the first two bears: Hour : Second :: Tertiary : ?
Alt1	Intermediary
Alt2	Primary
Alt3	Ordinary
Alt4	Secondary

3	Select the lettered pair that has the same relationship as the original pair of words: Stickler : Insist
Alt1	Laggard : Outlast
Alt2	Braggart : Boast
Alt3	Haggler : Concede
Alt4	Trickster : Risk

4	Select the lettered pair that has the same relationship as the original pair of words: Necromancy : Ghosts
Alt1	Romance : Stories
Alt2	Magie : Amulets
Alt3	Alchemy : Gold
Alt4	Sorcery : Spirits

5	Find out the number that has the same relationship as the numbers of the given pair: MAD : JXA : RUN : ?
Alt1	ORK
Alt2	OSQ
Alt3	PRJ
Alt4	UXQ

6	Spot the defective segment from the following:
Alt1	Keep the miscreants
Alt2	at your arm's length
Alt3	for
Alt4	they will pull the wool over your eyes

7	The terrorists held the tourists ----- for ransom.
Alt1	as hostages
Alt2	hostages
Alt3	hostage

Alt4	captives
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8	If I ----- wealthy, I would have got many friends.
Alt1	had been
Alt2	were
Alt3	was
Alt4	am

9	Choose the option closest in meaning to the given word: NEOLOGISM
Alt1	inoculation
Alt2	coinage
Alt3	consistency
Alt4	mirth

10	Choose the antonymous option you consider the best: SUAVE
Alt1	crestfallen
Alt2	polite
Alt3	rough
Alt4	cherished

11	In a certain code, REFRIGERATOR is coded as ROTAREGIRFER. Which word would be coded as NOITINUMMA ?
Alt1	ANMOMIUTNI
Alt2	AMNTOMUIIN
Alt3	AMMUNITION
Alt4	NMMUNITIOA

12	Traffic : Road in the same way as
Alt1	Aeroplane : Aerodrome
Alt2	Blood : Veins
Alt3	Roots : Tree
Alt4	Car : Garage

13	The following information is given: One of M.Gopi, his wife, their son and Mr.Gopi's mother is an architect and another is a doctor. (i) If the doctor is younger than the architect, then the doctor and the architect are not blood relatives. (ii) If the doctor is a woman, then the doctor and the architect are blood relatives. (iii) If the architect is a man, then the doctor is a man. Whose occupation is known by this information?
Alt1	Mr. Gopi is the doctor
Alt2	Mr. Gopi's son is the architect
Alt3	Mrs. Gopi is the doctor
Alt4	Mr. Gopi's mother is the doctor

14	Gopal was ranked 5th from the top and 16th from the bottom in a test. How many students were there in his class
Alt1	19
Alt2	21
Alt3	22
Alt4	20

15	Median of 10o, 5o, -2o, -1o, -5o, 15o is
Alt1	-2o
Alt2	-1o
Alt3	2o
Alt4	3o

16	Which of the following is 'OXYMORON'?
Alt1	Found Missing
Alt2	TIT-TAT
Alt3	GOTO
Alt4	Misunderstood

17	There are 5 persons in a class. Each one is shaking hand with the other. Find the total number of hand shakes?
Alt1	5
Alt2	10
Alt3	20
Alt4	60

18	Of the 26 Capital letters, how many are symmetrical along with vertical and horizontal axes.
Alt1	4
Alt2	3
Alt3	6
Alt4	5

19	There are 30 boys and 60 girls in a village . There are 70 men and 40 women in that village. What is the percentage of boys in that village?
Alt1	0.1
Alt2	0.25
Alt3	0.2
Alt4	0.15

20	There are N students in a class and only 8 of them are girls. If 11 boys added to the class,how many students in the class are boys?
Alt1	N+3
Alt2	N-3
Alt3	N-19

Alt4	19
21	Final product of anaerobic respiration is:-
Alt1	Methanol
Alt2	Pyruvate
Alt3	Ethanol
Alt4	Starch
22	Which Kingdom is the oldest in evolutionary terms?
Alt1	Monera
Alt2	Protista
Alt3	Fungi
Alt4	Animals
23	The progressive series of changes that eventually produce a climax community on what was once a bare rocky island is an example of:-
Alt1	Primary succession
Alt2	Evolution
Alt3	Restoration
Alt4	Secondary succession
24	A relationship in which two species benefit is called:-
Alt1	Mutualism
Alt2	Altruism
Alt3	Commensalism
Alt4	Amensalism
25	Viruses contain:-
Alt1	Ribosomes
Alt2	Chloroplasts
Alt3	Either DNA or RNA
Alt4	Only RNA
26	Which is the best biological indicator of SO ₂ pollution?
Alt1	Pteridophytes
Alt2	Bryophytes
Alt3	Lichens
Alt4	Viruses
27	Which of the following do not possess a flagella?
Alt1	Trypanosoma
Alt2	Amoeba
Alt3	Paramecium
Alt4	Euglena
28	Suppose out of 150 students in a class, 25 have green eyes. What would be the frequency of green eyed students in a class:-

Alt1	0.33
Alt2	0.25
Alt3	0.16
Alt4	0.5

29	What is a biodiversity hotspot?
Alt1	Regions with high levels of biodiversity
Alt2	Regions with large numbers of endangered species
Alt3	Regions with high proportion of endemic species
Alt4	High biodiversity, endemism and endangerment

30	Extinct bird of Mauritius island:-
Alt1	Heuglins gull
Alt2	Dodo
Alt3	Malachite sunbird
Alt4	Fairy tern

31	The transition zone between two vegetation types is called:-
Alt1	Ecosphere
Alt2	Ecotone
Alt3	Ecotype
Alt4	Ecosystem

32	A lichen is composed of:-
Alt1	Algae and fungi
Alt2	Fungi
Alt3	Fungi and Bacteria
Alt4	Algae and bacteria

33	Endophytes are found in:-
Alt1	Ocean
Alt2	Plants
Alt3	Tundra
Alt4	Viruses

34	The major pollutant from automobile exhaust is:-
Alt1	Soot
Alt2	SO ₂
Alt3	NO
Alt4	CO

35	Organisms reproducing once in life time are respectively referred in plants and animals as:-
Alt1	Monocarpic & semelparous
Alt2	Polycarpic & iteroparous
Alt3	Monophyletic & polyphyletic
Alt4	Viviparous & semelparous

36	Photosynthesis takes place faster in:-
Alt1	Yellow light
Alt2	Red light
Alt3	Darkness
Alt4	White light

37	How many biodiversity hotspots lie within Indias territory?
Alt1	Four
Alt2	Three
Alt3	One
Alt4	Two

38	Which is the largest mammal?
Alt1	Giraffe
Alt2	Dugong
Alt3	Blue Whale
Alt4	African elephant

39	What is Raunkiaer known for?
Alt1	Angiosperm classification
Alt2	Quadrat sampling methods
Alt3	Biodiversity studies
Alt4	Life form analyses for vegetation

40	Microbiology is concerned with the study of:-
Alt1	Electron microscopy
Alt2	Microorganisms
Alt3	Life on earth
Alt4	Macroorganisms

41	Mad cow disease is caused by:-
Alt1	A class of mycobacterium
Alt2	A prion
Alt3	A RNA virus
Alt4	A DNA virus

42	The effects of radioactive pollutants depends upon:-
Alt1	energy releasing capacity
Alt2	Rate of diffusion
Alt3	rate of deposition of the contaminant
Alt4	All of the above

43	Plants absorb dissolved nitrates from soil and convert them into:-
Alt1	Ammonia
Alt2	Free nitrogen
Alt3	Nitrite
Alt4	Urea

44	The first formed cells were:-
Alt1	Saprotrophs
Alt2	Viruses
Alt3	Photoautotrophs
Alt4	Chemoautotrophs

45	The competitive exclusion principle expounded by Gause was for:-
Alt1	Mice
Alt2	Protozoans
Alt3	Birds
Alt4	Plants

46	The most abundant element present in a plant is:-
Alt1	Carbon
Alt2	Protein
Alt3	Nitrogen
Alt4	Iodine

47	Lead poisoning:-
Alt1	Has no impact
Alt2	Reduces O ₂ carrying capacity in blood
Alt3	Increases O ₂ carrying capacity in blood
Alt4	Affects kidneys

48	Which one of the following is a major constituent of Biogas?
Alt1	Nitrogen dioxide
Alt2	Carbohydrates
Alt3	Hydrogen
Alt4	Methane

49	Anemophily & Chiropterophily respectively refer to:-
Alt1	Seed dispersal by wind & insects
Alt2	Pollination by winds & bats
Alt3	Pollination by animals & water
Alt4	Seed dispersal by bats & baboons

50	Laws of thermodynamics deal with the process of:-
Alt1	How heat is transformed into other forms like mechanical energy
Alt2	How heat is conducted in metals
Alt3	How heat is used by animals
Alt4	How heat is radiated

51	What is an endangered species?
Alt1	Species that are utilized by people
Alt2	Species that cause harm to humans
Alt3	Species that are in danger of extinction

Alt4	None of the above
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52	Which of these species is a primary consumer:-
Alt1	Deer
Alt2	Tiger
Alt3	Mushroom
Alt4	Banyan tree

53	Which of these is the Hardy-Weinberg equation?
Alt1	$p + 2pq + q = 0$
Alt2	$p^2 + 2pq + q^2 = 0$
Alt3	$p + q = 1$
Alt4	$p^2 + 2pq + q^2 = 1$

54	What is biomagnifications:-
Alt1	Increase in accumulation of toxins in liver
Alt2	Increase in acid rain
Alt3	Accumulation of pollutants in tissues of organisms at high trophic levels
Alt4	Decrease in minerals

55	Which are the direct modern day descendants of the dinosaurs?
Alt1	Reptiles
Alt2	Crocodiles
Alt3	Birds
Alt4	All vertebrates

56	Deforestation reduces _____ and increases _____.
Alt1	N uptake & photosynthesis
Alt2	CO ₂ uptake in photosynthesis, & global warming
Alt3	O ₂ uptake in respiration & guttation
Alt4	P uptake & transpiration

57	Nitrosomonas and Nitrobacter are:-
Alt1	Nitrifying bacteria
Alt2	Denitrifying bacteria
Alt3	Nitrogen fixing bacteria
Alt4	Saprophytic fungi

58	According to the second law of thermodynamics energy:-
Alt1	Decreases entropy
Alt2	Increases entropy
Alt3	Can neither be created nor destroyed
Alt4	Can be destroyed

59	A high Biological Oxygen Demand (BOD) indicates that:-
Alt1	Low level of microbial pollution
Alt2	water is pure

Alt3	High level of microbial pollution
Alt4	absence of microbial action

60	What is the percentage of energy transferred from one feeding level of the energy pyramid to the just above it is?
Alt1	0.2
Alt2	0.00001
Alt3	0.1
Alt4	0.01

61	Hydrochory refers to:-
Alt1	Seed dispersal by water
Alt2	Pollination by water
Alt3	Absorption of water
Alt4	Elimination of water

62	Which of these birds is NOT a migrant?
Alt1	Bar Headed Goose
Alt2	Red Wattled Lapwing
Alt3	Siberian Crane
Alt4	Arctic Tern

63	The study of life in outer space is known as:-
Alt1	Endobiology
Alt2	Astronomy
Alt3	Exobiology
Alt4	Astrology

64	The use of plants to degrade the environmental pollutants or to prevent pollution through waste water treatment is known as:-
Alt1	Phyto-detoxification
Alt2	Oxygenation
Alt3	Nitrification
Alt4	Phyto-remediation

65	Causes of coastal pollution include:-
Alt1	Oil-extraction, aquaculture, agriculture
Alt2	Oil-spills, effluents, solid dumps
Alt3	Under-utility of fishery resources
Alt4	Over- exploitation of fishery resources

66	The largest belt of rain forest is found in:-
Alt1	Congo Basin
Alt2	Irrawaddy Basin
Alt3	Amazon basin
Alt4	Gangetic basin

67	Name the scientist who developed the binomial nomenclature for species:-
Alt1	Mendel
Alt2	Aristotle
Alt3	Charles Darwin
Alt4	Linnaeus

68	Plants that grow in saline water are called:-
Alt1	Hydrophytes
Alt2	Halophytes
Alt3	Mesophytes
Alt4	Thallophytes

69	The concept that 'population tends to increase geometrically while food supply increases arithmetically was put forward by:-
Alt1	Adam Smith
Alt2	Stuart Mill
Alt3	Charles Darwin
Alt4	Thomas Malthus

70	Who received Noble Prize for working out the early carbon pathway of?
Alt1	Calvin
Alt2	Khorana
Alt3	Watson
Alt4	Krebs

71	High photosynthetic activity is seen in:-
Alt1	Bryophytes
Alt2	Angiosperms
Alt3	Algae
Alt4	Fern

72	Zero population growth is when:-
Alt1	Natality is greater than mortality
Alt2	Fecundity is greater than mortality
Alt3	Natality is equal to mortality
Alt4	Natality is less than mortality

73	The network of food chains in an ecosystem is a:-
Alt1	Tree of life
Alt2	Trophic pyramid
Alt3	Food web
Alt4	Web of Life

74	Approximately how many people are there on earth now:-
Alt1	About 2 billion
Alt2	More than 10 billion
Alt3	About 7 billion

Alt4	Over 20 million
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75	Invasive mosquito in India:-
Alt1	Anopheles stephensii
Alt2	Anopheles culicifacies
Alt3	Culex quinquefasciatus
Alt4	Aedes aegypti

76	Morphological evidences of organic evolution are explained primarily on:-
Alt1	Development
Alt2	Fossils
Alt3	Homology
Alt4	Blood tests

77	The number of children an average woman would bear in her life time is termed the:-
Alt1	Net reproductive Rate
Alt2	Replacement level Fertility
Alt3	Fecundity
Alt4	Total Fertility rate

78	Hormone causing leaf fall in plants:-
Alt1	Ethylene
Alt2	Abscissic Acid
Alt3	Auxins
Alt4	Gibberlins

79	Synapsis is the pairing of:-
Alt1	Paralogous chromosomes
Alt2	Analogous chromosomes
Alt3	Homologous chromosomes
Alt4	Non Analogous chromosomes

80	In a marine ecosystem which of these is a producer:-
Alt1	Corals
Alt2	Fungi
Alt3	Fishes
Alt4	Algae

81	What is the key feature of a biological community:-
Alt1	Mortality
Alt2	Stratification
Alt3	Natality
Alt4	Fecundity

82	Who described structure of the DNA:-
Alt1	Watson and Crick
Alt2	Hardy and Weinberg

Alt3	Darwin and Wallace
Alt4	Mendel and Curie

83	The carrying capacity of a population is determined by its :-
Alt1	Limiting resources
Alt2	Mortality
Alt3	Natality
Alt4	Population growth rate

84	A population is defined as:-
Alt1	Individuals of a species living in a particular area
Alt2	Individuals of a single species
Alt3	A set of species
Alt4	Individuals living in a particular area

85	Significance testing is based on the following principles:-
Alt1	Nullification
Alt2	Evaluation
Alt3	Falsification
Alt4	Verification

86	What is the symbol for Pi:-
Alt1	¥
Alt2	α
Alt3	π
Alt4	\neq

87	Konrad Lorenz is known for describing:-
Alt1	Genetic divergence
Alt2	Mitosis
Alt3	Stereotypy
Alt4	Imprinting

88	Which of the following is not surrounded by a double membrane in eukaryotes?
Alt1	Mitochondria
Alt2	The nucleus
Alt3	The cell
Alt4	Chloroplast

89	If there is a probability of 5% in how many cases would a result arise solely due to chance:-
Alt1	10/100
Alt2	5/100
Alt3	50/50
Alt4	0.0005

90	Nuclear DNA sends information for protein synthesis through:-
Alt1	rRNA

Alt2	mRNA
Alt3	tRNA
Alt4	Enzymes

91	The binomial distribution is used with:-
Alt1	Binary continuous variables
Alt2	Binary count variables
Alt3	Continuous random variables
Alt4	Discrete random variables

92	To describe the most useful number of eggs in a clutch of Ostrich eggs you would use:-
Alt1	Geometric mean
Alt2	The arithmetic mean
Alt3	The median
Alt4	The mode

93	Find the value of x; if $x = (2 \times 3) + 11$:-
Alt1	192
Alt2	17
Alt3	21
Alt4	55

94	The circumference of a circle is 72 cm. What would be its diameter:-
Alt1	41.1 cm
Alt2	36 cm
Alt3	11.4 cm
Alt4	22.9 cm

95	The first birds evolved in the:-
Alt1	Palaeocene
Alt2	Triassic
Alt3	Jurassic
Alt4	Cretaceous

96	Two numbers are in ratio 4 : 5. If the sum of the numbers is 135, find the numbers:-
Alt1	65 and 75
Alt2	60 and 75
Alt3	50 and 65
Alt4	70 and 95

97	Separation of proteins by gel electrophoresis is called:-
Alt1	Eastern blot
Alt2	Western blot
Alt3	Northern blot
Alt4	Southern blot

98	What did the famous Russian ethologist Pavlov demonstrate?
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Alt1	Stereotypic behavior
Alt2	Classical conditioning
Alt3	Intuition
Alt4	Imprinting

99	T-lymphocytes are formed in:-
Alt1	Liver
Alt2	Yolk
Alt3	Spleen
Alt4	Bone marrow

100	What organism did Konrad Lorenz work on?
Alt1	Arabidopsis
Alt2	Geese
Alt3	Drosophila
Alt4	Escherichia coli