

ST. XAVIER'S COLLEGE, RANCHI

(An Autonomous College of Ranchi University)

Full Marks : 100

2014-15

SET - D

Time : 2 Hours

EXAM ROLL NO : 19888 12SZ0009868
(Fill last five digit of your Exam Roll No. on the OMR Sheet)
STUDENT NAME : SHAFIQUE ZAHRA

INSTRUCTIONS TO STUDENTS

1. This Booklet contains 100 questions. All questions are compulsory and carry equal marks.
2. Before you start answering the questions you must check this Booklet and ensure that it contains all the pages (1-11) and see that no page is missing or repeated. If you find any defect in this Booklet, you must get it replaced immediately.
3. You will be supplied the OMR Answer Sheet separately by the Invigilator. You must complete and code the details of Name, Exam Roll No. (last five digit) and Set Number on the Answer Sheet carefully. You must also put your signature at the prescribed place before you actually start answering the questions. These instructions must be fully complied with, failing which, your Answer-Sheet will not be evaluated and you will be awarded 'ZERO' mark.
4. Answers must be shown by completely blackening the corresponding circles on the Answer-Sheet against the relevant question number by **Black/Blue Ball Point Pen/ Dark HB Pencil** only. More than one darkened circles will be awarded as Zero Mark.
5. The Question Booklet and OMR Answer-Sheet must be handed over to the Invigilator before you leave the Examination-Hall.
6. Answer the questions as quickly and as carefully as you can. Do not spend too much time on any question.
7. **No rough work is to be done on the OMR Answer-Sheet.** Rough work can be done on this Booklet.
8. **"Mobile phones and wireless communication devices are completely banned in the examination halls/rooms. Students are advised not to keep mobile phones/any other communication devices with them even switching it off, in their own interest. Failing to comply with this provision will be considered as using unfair means in the examination and action will be taken against them."**
9. **There is negative marking. 0.25 marks will be deducted for each wrong answer.**

1. Intermediate zone in aquatic ecosystem where production almost balances consumption is
 - a) Epilimnion
 - b) Thermocline
 - c) Hypolimnion
 - d) Hyperlimnion
2. The objective and guiding principle for developing environmental education at all levels were formulated at
 - a) UNESCO conference 1975
 - b) Tbilisi conference 1977
 - c) UNESCO conference 1977
 - d) All the above
3. World water day is observed on
 - a) April 22
 - b) March 22
 - c) November 12
 - d) October 20
4. Chalcolithic age refers to
 - a) Bronze age
 - b) Iron age
 - c) Copper age
 - d) Stone age
5. Which of the following was short and poorly defined
 - a) Neolithic
 - b) Mesolithic
 - c) Palaeolithic
 - d) Neolithic
6. Ecosystem services include
 - a) purification of air and water
 - b) mitigate draughts and floods
 - c) nutrient cycling and generating fertile soil
 - d) all of the above
7. Purest form of water is
 - a) Tank water
 - b) Fountain Water
 - c) Rain water
 - d) Sea water
8. Major autotrophic component of an ecosystem are
 - a) Green plants
 - b) chemosynthetic bacteria
 - c) Green plant + chemosynthetic bacteria
 - d) green plants and saprotrophs
9. What does EIA abbreviation stands for
 - a) Environment Indian Association
 - b) Eco India Alignment
 - c) Environment Impact Awareness
 - d) Environment Impact Assessment
10. Which act was constituted in year 1972 ?
 - a) Wildlife Act
 - b) forest conservation Act
 - c) Air (Prevention & control of pollution) Act
 - d) Water (Prevention & control of pollution) Act

11. Who coined the term ecology?
 - a) Reiter
 - b) Hackel
 - c) Odum
 - d) Tansley
12. Energy flow in an ecosystem supports
 - a) 1st law
 - b) 2nd law
 - c) 1st & 2nd law
 - d) none
13. Limnology is the study of
 - a) Lakes
 - b) fresh water ecosystem
 - c) Marine ecosystem
 - d) both marine and fresh water ecosystems
14. Most food chains consist of how many trophic levels?
 - a) 2 - 4
 - b) 3 - 5
 - c) 4 - 6
 - d) 5 - 7
15. The World Summit on sustainable development took place in September 2002 at
 - a) Brazil
 - b) Johannesburg
 - c) Leeds
 - d) US
16. Principal sources of nitrous oxide is
 - a) Aerosols
 - b) Fertilizers
 - c) Deforestation
 - d) Livestock
17. United Nation Conference on Human environment was held in June 1972 Act
 - a) Berlin
 - b) Prague
 - c) Vienna
 - d) Stockholm
18. Which are the most important decomposers in an ecosystem
 - a) Algae & fungi
 - b) bacteria & fungi
 - c) Algae & earthworms
 - d) fungi & earthworms
19. World Ozone day is observed on
 - a) September 28
 - b) September 16
 - c) September 13
 - d) September 14
20. Dead organic matter is fragmented by
 - a) decomposers
 - b) saprotrophs
 - c) osmotrophs
 - d) detritivores

21. The Natural Calamity which affected Vishakhapatnam in October 2014
 - a) Nilofar
 - b) Kareena
 - c) Hudhud
 - d) Phailin
22. The definition of sustainable development has been given in commission document entitled
 - a) World conservation strategy
 - b) Man & Biosphere
 - c) Our Common Endeavour
 - d) Our Common Future
23. In terms of energy an ecosystem is
 - a) open unit
 - b) closed unit
 - c) may be open or close
 - d) neither open nor close
24. What is the expanded form of UNCSD
 - a) United Nations Conservation strategy & development
 - b) United Nations Commission on sustainable development
 - c) United Nations Council of State development
 - d) United Nations Common Support for Development
25. On a clear sunny day the amount of sun light reaching earth's surface is about
 - a) 10%
 - b) 20%
 - c) 45%
 - d) 55%
26. Most polluted city in the world
 - a) Switzerland
 - b) Stockholm
 - c) Calcutta
 - d) Mexico City
27. How much percent of coral reefs have vanished over last few decades
 - a) 25%
 - b) 45%
 - c) 60%
 - d) 70%
28. Burning of coal in a closed room produces which of the following gas
 - a) Nitrogen
 - b) Hydrogen
 - c) Carbon mono oxide
 - d) Oxygen
29. The process of decomposition is fastest in
 - a) tropical rainforest
 - b) Antarctica
 - c) dry arid region
 - d) alpine region
30. Who started the campaign Vriksha Ropan in 1928 in India
 - a) Bahuguna
 - b) Tagore
 - c) Godrej
 - d) M.S. Swaminathan

31. In Ranchi Hydro power plant is situated at
 - a) Patratu
 - b) Sikidhri
 - c) Bokaro
 - d) Ramgarh
32. Which is the major source of power generation in India?
 - a) Coal - based thermal plants
 - b) Wind - based power plants
 - c) Hydro - power plants
 - d) Wood-based thermal plants
33. Chipko movement followed the path of Bisnoi woman who had prevented the felling of which trees
 - a) Sal
 - b) Khejri
 - c) Mauha
 - d) Peepal
34. Who said that man's needs but not his greed can be supported by our earth
 - a) Mahatma Gandhi
 - b) Socrates
 - c) Max Miiller
 - d) Indira Gandhi
35. SO₂ a major contributor to formation of acid precipitation comes mainly from
 - a) Automobile exhausts
 - b) thermal power plants
 - c) Oil refinery
 - d) fertilizer factory
36. What is the current average level of CO₂ in the atmosphere
 - a) 400 PPM
 - b) 250 PPM
 - c) 150 PPM
 - d) 600 PPM
37. From which district did Chipko Revolution Start
 - a) Satna (M.P)
 - b) Chamoli (Uttranchal)
 - c) Bhopal (M.P)
 - d) Raipur (Chhattisgarh)
38. Which is the largest contributor to GHGs?
 - a) CO₂
 - b) CH₄
 - c) CFCs
 - d) Water vapour
39. The amount of inorganic substance in the ecosystem is called
 - a) Standing quality
 - b) Standing crop
 - c) Standing matter
 - d) standing biomass
40. Which zone extends up to the bottom of oceans
 - a) Bathyal zone
 - b) Abyssal zone
 - c) Euphotic zone
 - d) dysphotic zone

41. Which country has the worst air quality in the world
 - a) China
 - b) India
 - c) Africa
 - d) Pakistan
42. All civilizations have depended mainly on what, for subsistence
 - a) Fire
 - b) agriculture
 - c) hunting
 - d) domestication of animals
43. The Cancun Agreement 2010 is for addressing long term challenge of
 - a) Climate Change
 - b) Deforestation
 - c) Ozone depletion
 - d) Water Pollution
44. Two real components of an ecosystem are
 - a) plants and animals
 - b) trees and grasses
 - c) biotic and abiotic factors
 - d) carnivores and omnivores
45. An area which is actively defended by an animal from a intruder of the same species is
 - a) niche
 - b) home range
 - c) territory
 - d) habitat
46. National Environment Engineering Research Institute is situated at
 - a) Bangalore
 - b) Hyderabad
 - c) Nagpur
 - d) Chotanagpur
47. During community succession which is the pioneer community
 - a) Moss
 - b) foliose lichen
 - c) Crustose lichen
 - d) Herbs
48. A single atom of chlorine may break how many molecules of ozone before it drifts into lower atmosphere
 - a) 100
 - b) 800
 - c) 10000
 - d) 100000
49. The concentration of O_3 in stratosphere is maintained around
 - a) 3 PPM
 - b) 6 PPM
 - c) 8 PPM
 - d) 10 PPM
50. Which is the main source of CH_4 ?
 - a) Fossil fuels
 - b) vehicular exhausts
 - c) Chemical factory
 - d) Paddies

51. An abiotic component of environment is
 - a) plants
 - b) lichens
 - c) light
 - d) fungi
52. Which one is important in Carbon cycle?
 - a) Respiration by organisms
 - b) Activity of bacteria in root nodules
 - c) Thunder & lightning
 - d) Absorption of mineral salts by roots
53. Pyramid of energy may be inverted in which ecosystem?
 - a) desert
 - b) ocean
 - c) tundra
 - d) rain forest
54. Grazing food chains starts from
 - a) Grass
 - b) green plants
 - c) Algae
 - d) lichens
55. Rate of storage of organic matter in plants excess of respiratory utility by plants is called
 - a) Primary productivity
 - b) Gross Primary Productivity
 - c) Net Primary Productivity
 - d) Net Productivity
56. In an ecosystem snake mostly is a
 - a) primary consumer
 - b) secondary consumer
 - c) tertiary consumer
 - d) quarter nary consumer
57. Which of the following is not involved in Acid Rain
 - a) Sulphur di-oxide
 - b) Carbon di-oxide
 - c) Oxides of nitrogen
 - d) Argon
58. Which continent is most affected by acid rain
 - a) Africa
 - b) Europe
 - c) Asia
 - d) Australia
59. "Cow of the Ganges" is
 - a) Turtle
 - b) Whale
 - c) Dolphin
 - d) Neelgai
60. Which of the following products is obtained from plants
 - a) Gum
 - b) Tussar
 - c) Shellac
 - d) Pearl

61. The most productive ecosystems are
 - a) Desert ecosystem
 - b) grass land
 - c) Temperate forest
 - d) tropical rain forest
62. Rain water is naturally acidic so for acid rain the PH should be
 - a) 6.00
 - b) 5.00 or <5.00
 - c) Less than 5
 - d) 3.00
63. Which has highest contribution in Global warming
 - a) Energy use & production
 - b) CFC
 - c) Agricultural activity
 - d) Land use modification
64. World Wildlife Week is observed every year on
 - a) First week of January
 - b) last week of June
 - c) Last week of December
 - d) First week of October
65. The longest consistent civilization in human history so far is that of
 - a) Aegian
 - b) China
 - c) Indus
 - d) Mesopotamia
66. Tree which absorbs most water is
 - a) Tamarind
 - b) Mango
 - c) Eucalyptus
 - d) Peepal
67. Which is the best option to combat pollution?
 - a) Reduce
 - b) Reuse
 - c) Recycle
 - d) Redesign
68. The emission of per fluoro carbons is being reduced with implementation of
 - a) Montreal protocol
 - b) Kyoto Protocol
 - c) Earth summit
 - d) MAB Programs
69. Which are the major sinks for atmospheric CO₂
 - a) Mountainous Region
 - b) Desert & Grass Land
 - c) Ocean & Biomass
 - d) Water
70. Global mean sea level has risen by
 - a) 1-2 inches
 - b) 4-8 inches
 - c) 10-12 inches
 - d) 13-15 inches

71. The Environment (protection) Act 1986 defines hazardous substance as a substance that
 - a) exhibits corrosivity
 - b) is liable to cause harm to living beings
 - c) exhibits phytotoxicity
 - d) exhibits faunal toxicity
72. What % age of water on earth is fresh water
 - a) 3
 - b) 9
 - c) 7
 - d) 10
73. The global 500 award is given in which of the following field
 - a) Pollution Control
 - b) Population control
 - c) Gene preservation
 - d) Environment preservation
74. Which are likely to be present in largest number in a food web?
 - a) Aphids
 - b) Caterpillar
 - c) Gold finches
 - d) Hawks
75. At each trophic level energy not used is lost in form of
 - a) matter
 - b) free energy
 - c) heat
 - d) water
76. Nile valley settlement dates back to
 - a) 4500 BC
 - b) 6000 BC
 - c) 3000 BC
 - d) 1000 BC
77. Edaphic factor refers to
 - a) water
 - b) soil
 - c) relative humidity
 - d) altitude
78. What does IPCC stand for
 - a) Inter-Governmental panel on climate change
 - b) Inter-Governmental protection of Climate change
 - c) International protection of climate change
 - d) International panel on climate change
79. In forest ecosystem number of trophic levels in a food chain is usually
 - a) 3
 - b) 4
 - c) 5
 - d) 7
80. Which monument in Greece has been corroded by acid rain?
 - a) Parthenon
 - b) Byzantine
 - c) Pantheon
 - d) St Peter's Basilica

81. A group of interconnected food chains is called
 - a) Complex food chain
 - b) Wonder food net
 - c) Food web
 - d) Food cycle
82. The process involved in creation of earth's inorganic materials is
 - a) Geographic cycle
 - b) Geological cycle
 - c) Bio geological cycle
 - d) Biochemical cycle
83. What change will occur if replantation is done on a plain land
 - a) decrease in rainfall
 - b) decrease in moisture in air
 - c) lowering of water level
 - d) increase in water holding capacity of soil
84. GHGs bring about following change in the atmosphere
 - a) Increase the temperature
 - b) May decrease the temperature
 - c) Increase the rains
 - d) All the above
85. Environment (protection) Act was established in
 - a) 1978
 - b) 1986
 - c) 1965
 - d) 1980
86. About how much of solar energy that falls on leaves is converted to chemical energy?
 - a) 1%
 - b) 10%
 - c) 30%
 - d) 50%
87. Which bacteria converts Urea to Ammonia?
 - a) Decomposing bacteria
 - b) denitrifying bacteria
 - c) Nitrifying bacteria
 - d) Nitrogen fixing bacteria
88. Energy and nutrients enter a community by way of
 - a) Producers
 - b) consumers
 - c) Scavanger
 - d) Detritivores
89. A green building is one which
 - a) Optimizes energy efficiency
 - b) Provides sufficient spaces for occupants
 - c) Green in colour to camouflage with nature
 - d) Has been designed in Greenland
90. A sequence of species through which organic molecules in a community pass through is called
 - a) Pyramid of energy
 - b) Food chain
 - c) Food web
 - d) Nutrient cycle

91. A system that consists of both biotic and abiotic components
 - a) Ecology
 - b) ecosystem
 - c) Habitat
 - d) community
92. Sumerians belonged to which place?
 - a) Babylon
 - b) Egypt
 - c) Mesopotamia
 - d) Crete
93. Where was the Earth Day first celebrated in 1970
 - a) USA
 - b) Brazil
 - c) Greenland
 - d) Detroit
94. Balance in nature is called
 - a) Homeostatics
 - b) Homeorhesis
 - c) Cybernetics
 - d) servomechanisms
95. Who amongst the following proposed the three fold classification of environmental education?
 - a) Newman
 - b) Salim Ali
 - c) Pitter
 - d) None of above
96. Due to burning of crops the fertile soil shows a reduction in
 - a) calcium
 - b) silt
 - c) clay
 - d) humus
97. Running water ecosystems are called
 - a) Lotic
 - b) Lentic
 - c) Limnetic
 - d) Littoral
98. What is the extent of stratosphere above earth's surface?
 - a) From 10 km to 50 km
 - b) From 20 km to 60 km
 - c) From 30 km to 80 km
 - d) From 50 km to 90 km
99. Correct form of food chain is
 - a) Insect - Weed - Bird - Frog
 - b) Frog - Bird - Weed - Insect
 - c) Weed - Insect - Frog - Bird
 - d) Bird - Frog - Insect - Weed
100. Which state in India was the first to regulate the manufacture and use of plastics?
 - a) Manipur
 - b) Kerala
 - c) Gujarat
 - d) Himachal Pradesh

ST. XAVIER'S COLLEGE, RANCHI
B.Sc./S-V/EVS
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ANSWER KEY

EVS Science SET-D

QNo	Answer	QNo	Answer	QNo	Answer	QNo	Answer	QNo	Answer
1	B	11	B	21	C	31	B	41	D
2	B	12	C	22	D	32	A	42	B
3	B	13	B	23	A	33	B	43	A
4	C	14	B	24	B	34	A	44	C
5	B	15	B	25	C	35	B	45	C
6	D	16	B	26	D	36	A	46	C
7	C	17	D	27	A	37	B	47	C
8	A	18	B	28	C	38	D	48	D
9	D	19	B	29	C	39	A	49	C
10	A	20	D	30	B	40	B	50	D
QNo	Answer	QNo	Answer	QNo	Answer	QNo	Answer	QNo	Answer
51	C	61	D	71	B	81	C	91	B
52	A	62	B	72	A	82	B	92	C
53	B	63	A	73	D	83	D	93	A
54	A	64	D	74	A	84	A	94	B
55	C	65	B	75	C	85	B	95	A
56	C	66	C	76	B	86	A	96	D
57	D	67	A	77	B	87	C	97	A
58	B	68	B	78	A	88	A	98	A
59	C	69	C	79	A	89	A	99	C
60	A	70	B	80	A	90	B	100	D