SECTION C: CHAPTER – END TEST

1. A_0 layer is rich in **(2007)**

(A)Litter (B)Minerals

(C)Leachates **(D)**Humus

2. Large sized rooted plants found in shallow waters are called **(2007)**

(A) Macrophytes (B)Microphytes

(C)Phagophytes (D)Saprophytes

3. Population of an insect species increase explosively during rainy season and then disappears at the end of the season. It shows **(2007)**

(A)Food plants mature and die at the end of rainy season

(B)Population of predators increases enormously

(C) Population growth curve is J-shaped

(D)Population growth curve is S-shaped

4. Study of inter-relationships between a species/individuals and its environment in all stages of its life cycle is **(2008)**

(A)Synecology (B)Forest Ecology

(C)Autecology (D)Ecology

5. Study of inter-relationships between an entire community and its environment is **(2008)**

(A)Autecology (B)Resource Ecology

(C) Species Ecology (D)Synecology

6. The sum total of the populations of the same kind of organisms constitute

(A)Colony (B)Genus

(C)Community **(D)**Species

7. Quercus species are dominant component of **(2008)**

(A)Temperature forest (B)Tropical rain forest

(C)Alpine forest **(D)**Scrub forest

8. Most populous country of the world is **(2008)**

(A) Bangladesh (B)Indonesia

(C)India (D)China

9. Root of higher plants develop mycorrhiza for obtaining **(2008)**

(A)Sulphates (B)Nitrogen

(C)Phosphates **(D)**All the above

10. Small fish sticks to bottom of shark to obtain food crumbs. **(2008)**

(A)Antibiosis (B)Predation

(C) Commensalism (D)Parasitism

11. An association of individuals of different species living in the same habitat and having functional interactions is **(2009)**

(A)Population (B)Ecological niche

(C) Biotic community (D)Ecosystem

12. Reduction in vascular tissue, mechanical tissue and cuticle are characteristic of **(2009)**

(A)Mesophytes **(B)**Hydrophytes

(C)Xerophytes (D)Epiphytes

13. Halophytes occur in **(2009)**

(A)Salty soil **(B)**Desert

(C)Near river (D)Rainy water

14. A mutually beneficial association necessary for survival of both partners is **(2009)**

(A) Mutualism/Symbiosis (B)Commensalism

(C)Amensalism (D)Both A and B

15. A teacher explaining physical contact leading to equal physiological dependence between two thalloid forms was telling about **(2009)**

(A)Mycorrhizal association

(B)Establishment of heterothallism

(C)Operation of heterothallism

(D) Advent of lichen formation

16. Soil transported by air is **(2010)**

(A)Alluvial (B)Colluvial

(C)Glacial **(D)**Eolian

17. Soil best suited for plant growth is **(2010)**

(A)Clay **(B)**Loam

(C) Sandy (D)Eolian

18. One of the following is not true for hydrophytes **(2010)**

(A)Vessels are usually absent

(B)Cuticle is poorly developed

(C) Tracheids are absent

(D)Air chambers are well developed

19. Microscopic aquatic organisms lacking locomotory ability and drifting with water current are **(2010)**

(A)Pleuston (B)Nekton

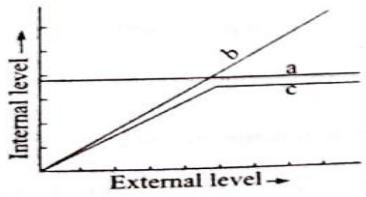
(C) Plankton (D)Seston

20. Which of the following is a xerophytic plant in which the stem is modified into a flat green had succulent structure? **(2010)**

(A)*Casuarina* **(B)***Opuntia*

(C)*Hydrilla* (D)*Acacia*

21. The figure given below is a diagrammatic representation of response of organisms to abiotic factors. What do (a), (b). (c) represent respectively? **(2010)**



(A)a—Regulator, b—Partial regulator, c—Conformer

(B)a—Partial regulator, b—Regulator, c—Conformer

(C)a—Regulator, b—Conformer, c—Partial regulator

(D)a—Conformer, b—Regulator, c—Partial regulator

22. Bell-shaped polygonal pyramid indicates **(2010)**

(A)High percentage of old individuals

(B)Low percentage of young individuals

(C) Moderate percentage of young individuals

(D)Low percentage of old individuals

23. Rhizophere microflora exhibits **(2010)**

(A) Symbiosis (B)Invertebrates

(C)Insectivorous plants (D)Saprophytic plants

24. Biotrophic nutrition is shown by

(A)Humans (B)Invertebrates

(C) Insectivorous plants (D)Saprophytic plants

25. Which is appropriately defined? **(2010)**

(A)Host is an organ ism which provides food to another organism

(B)Amensalism is relationship in which one species is benefitted while the other is unaffected

(C) Predator is an organism that catches and kills other organisms for food

(D)Predator is an organism which always lives inside the body of other organism and may kill it.

26. Study statements (a—d) and select the correct ones. **(2010)**

(a)A lion eating a deer and a sparrow feeding on grain are consumers.

(b)Predator star fish, *Piaster*, helps in maintaining species diversity of some invertebrates.

(c)Predators ultimately lead to extinction of prey species.

(d)Plant chemicals like nicotine and strychnine are

(A)c and d (B)a and d

(C)a and b (D)b and c

27. Which of the following is/are an angiospermic hydrophyte? **(2010)**

(A)*Hydrilla* (B)*Vallisneria*

(C)*Zizyphus* **(D)**Both A and B

28. Large woody vines are more commonly found in **(2011)**

(A) Tropical rain forests (B)Alpine forests

(C)Temperate forests (D)Mangroves

29. Most economical and effective method of control of soil pH is applicable of **(2011)**

(A)$CaCO_3$ (B)$Ca(OH)_3$

(C)$Cacl_3$ (D)$Ca(NO_3)_2$

30. Select the correct pair of adaption in desert lizards. **(2011)**

a.Burrowing in soil to escape high temperature

b.Losing heat rapidly at high temperature

c.Bask in the sun when temperature is low

d.Insulating body with thick fatty dermis

(A)b, d (B)a, b

(C)c, d **(D)a, c**

31. Root cap is absent in **(2011)**

(A)Xerophytes (B)Mesophytes

(C)Hydrophytes (D)Halophytes

32. Most important for determining population growth is **(2011)**

(A)Population size

(B)Natality

(C)Vital index

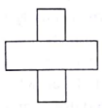
(D)Population growth curves

33. Number of births per year per 1000 individuals is **(2011)**

(A)Demography **(B)Natality**

(C)Mortality (D)Density

34. Which type of human population is represented by this age pyramid? **(2011)**



(A)Declining population

(B)Expanding population

(C)Vanishing population

(D)Stable population

35. Which one is parasite in true sense? **(2011)**

(A) Head Louse living on human scalp as well as laying eggs on human hair.

(B)Cuckoo laying eggs in Crow's nest.

(C)Female *Anopheles* biting and sucking blood from humans.

(D)Human foetus inside uterus and drawing nourishment from mother.

36. Some organisms are tolerant to a narrow range of salinity and are termed as **(2012)**

(A)Euryhaline **(B)**Stenohaline

(C)Neither (a) or (b) (D)Saline

37. Full name of professor Misra who is known as the Father of Ecology in India is **(2013)**

(A)Ramesh Misra (B)Ramavtar Misra

(C)Ramekant Misra **(D)**Ramdeo Misra

38. The term niche of a species refers to **(2013)**

(A)Specific place where an organism lives

(B)Competitive power of an organism

(C)Specific function of an organism

(D) Specific and habitual function

39. Main characteristic of halophytes is **(2013)**

(A)Sunken stomata **(B)**Vivipary

(C)Heterophylly (D)All of the above

40. Population growth curve is sigmoid, if the growth pattern is **(2013)**

(A) Logistic (B)Geometric

(C)Exponential (D)Accretinary

41. Which of the following is an intraspecific interaction? **(2013)**

(A)Amensalism (B)Commensalism

(C)Symbiosis **(D)**Cannibalism

42. Orchid growing on other plants as **(2013)**

(A)Parasite (B)Symbiont

(C)Commensal **(D)**Epiphyte

43. Benthic organism are affected the most by **(2013)**

(A)Light reaching the forest floor

(B)Surface turbulence of water

(C) Sediment characteristics of aquatic ecosystems

(D)Water-holding capacity of soil

44. A biologist studied the population of rats in a barn. He found that the average natality was 250, average mortality 240, immigration 20 and emigration 30. The net increase in population is **(2013)**

(A)05 **(B)**Zero

(C)10 (D)15

45. The age pyramid with broad base indicates **(2013)**

(A)High percentage of old individuals

(B)Low percentage of young individuals

(C)A stable population

(D) High percentage of young individuals

46. A sedentary sea anemone gets attached to the shell lining **(2013)**

(A)Commensalism (B)Amensalism

(C)Ectoparasitism **(D)**Symbiosis

47. Which one of the following is not a parasitic adaptation? **(2013)**

(A)Development of adhesive organs

(B)Loss of digestive organs

(C) Loss of reproductive capacity

(D)Loss of unnecessary sense organs

48. Most productive biome of India is **(2014)**

(A)Desert (B)Deciduous forest

(C) Tropical Rain Forest (D)Temperature forest

49. Just as a person moving from Delhi to Shimla to escape the heat for the duration of hot summer, thousands of migratory birds from Siberia and other extremely cold northern regions move to **(2014)**

(A) Keolado National Park

(B)Western Ghat

(C)Meghalaya

(D)Corbett National Park

50. Which of the following is correct? **(2014)**

(A) Population change = (Birth + immigration) – (death + emigration)

(B)Population change = (Birth + immigration) + (death + emigration)

(C)Population change = (Birth + emigration) + (death – immigration)

(D)Population change = (Birth – immigration) – (death + emigration)

51. Age distribution is the characteristic of **(2014)**

(A)Organism **(B)**Population

(C)Community (D)Ecosystem

52. Which of the following is epiphytic plant species? **(2014)**

(A)*Visumi* (B)*Cuscuta*

(C)*Vanda* (D)*Loranthus*

53. One species is benefitted and other is neutral. This association is called **(2014)**

(A)Mutualism **(B)**Commensalism

(C)Amensalism (D)Parasitism

54. Which of the following is an example of mutualism?

(A)Abingdon tortoise in Galapagos island **(2014)**

(B)Yeast & roots of plants

(C) Fungi & cyanobacteria

(D)Algac & cyanobacteria

55. Which of the following shows mutualism?**(2014)**

(A) Fig and wasp

(B)Orchid growing on mango branch

(C)Clown fish and Sea Anemonc

(D)Barnacle growing on back of whale

56. "Two species competing for the same resources cannot co-exist indefinitely". This statement is **(2014)**

(A)Connell's elegant field experiment

(B)Rivet Popper hypothesis

(C)Mac Arthur experiment

(D) Gaue's competitive exclusion principle

57. (+) and (0) interactive shown by

(A)Parasitism (B)Mutualism

(C)Amensalism **(D)**Commensalism

58. National tree of India is **(2014)**

(A)*Mangifera indica* (B)*Azodirachta indica*

(C)*Ficus bengalensis* (D)*Ficus religiosa*

59. In Which of the following interactions both partners are adversely affected? **(2015)**

(A)Predation (B)Parasitism

(C)Mutualism **(D)**Competition

60. An association of individuals of different species living in the same habitat and having functional interactions is **(2015)**

(A)Biotic community (B)Ecosoystem

(C)Population **(D)**Ecological niche

61. Roots play insignificant role in absorption of water in **(2015)**

(A)*Pistia* (B)Pea

(C)Wheat (D)Sunflower

62. Most animals are tree dwellers in a

(A)Temperature deciduous forest

(B) Tropical rain forest

(C)Coniferous forest

(D)Thorn woodland

63. The correct statement is **(2015)**

(A) In a population, number of births is different from birth rate

(B)A sigmoid growth curve depiction of exponential growth

(C)In a logistic growth curve the asymptote is beyond the carrying capacity

(D)'r' is equal to the difference between number of births and number of deaths in a population.

64. The adaptations in an organisms are meant for **(2015)**

(A)Optium primary production

(B)Optium life span

(C)optium mobility

(D) Optium survival and reproduction

65. 'Verhulst — Peral' is associated with the equation **(2015)**

(A) $\frac{dN}{dt} = rN\left(\frac{K-N}{K}\right)$ (B) $\frac{dN}{dt} = tN\left(\frac{K-N}{K}\right)$

(C) $\frac{dN}{dt} = rN\left(\frac{K-N}{N}\right)$ (D) $\frac{dN}{dt} = tN\left(\frac{K-N}{N}\right)$

66. The organism which can tolerate and thrive in a wide temperature rang are known as **(2015)**

(A) Eurythermal (B)Isothermal

(C)Homothermal (D)Stenothermal

67. The Verhulst—Pearl logistic growth is described using the equation $\frac{dN}{dt} = rN\left(\frac{K-N}{K}\right)$, in this K stand for **(2015)**

(A)Temperature in degree Kelvin

(B)Intrinsic rate of natural increase

(C) Carrying capacity

(D)Population density

68. A succulent xerophytes is **(2015)**

(A)*Capparis* (B)*Calotropis*

(C)*Agave* (D)None of above

69. Germination of seed inside the fruit which is still attached **(2015)**

(A)Parthenocarpy (B)Parasitism

(C)Commensalism **(D)**Vivipary

70. Unlike in other plants, leaves of cactus serve the twin purpose of **(2015)**

(A)Photosynthesis and transpiration

(B)Transpiration and vegetative propagation

(C) Protection and water conservation

(D)Water storage and photosynthesis

71. Sigmod/logistic growth curve is represented by **(2015)**

(A) $\frac{dN}{dt} = rN$

(B) $\frac{dN}{dt} = rN\,(1—N/k)$

(C) $N_t = N_o + B + I - D - E$

(D) $\frac{dN}{dt} = 1 - \frac{N}{K}$

72. Density of population D is **(2016)**

(A)S(size)/W(weight)

(B)S(size)/N(number)

(C)N(number)/S(space)

(D)S(space)/W(weight)

73. Place occupied by an organism in relation to environment is **(2016)**

(A)Habit **(B)**Habitat

(C)Edaphic (D)Niche

74. Amongst hydrophytes finely dissected leaves occur in **(2016)**

(A)Rooted floating leaved plants

(B) Submerged plants

(C)Emerged plants

(D)Free floating plants

75. When does the growth rate of a population following the logistic model equal zero? The logistic model is given as dN/dt = rN(1—N/K) **(2016)**

(A)When N/K equals zero

(B)When death rate is greater than birth rate

(C) When N/K is exactly one

(D)When N nears the carrying capacity of the habitat

76. Gause's principle of competitive exclusion states that **(2016)**

(A) No two species can occupy the same niche indefinitely for the same limiting resources

(B)Larger organisms exclude smaller ones through competition

(C)More abundant species will exclude the less abundant species through competition

(D)Competition for the same resources excludes species having different food preferences

SECTION D: CHAPTER – END TEST

1. Wattest region of India is

(A)Assam **(B)**Meghalaya

(C)U.P. (D)Rajasthan

2. Biome with broad-leaved fire resistance drought enduring plants is

(A)Savannah (B)Steppes

(C) Chapparal (D)Deciduous forest

3. Plants growing on sandstone are

(A)Psammophtes (B)Oxylophytes

(C) Lithophytes (D)Phanerophytes

4. Soil salinity is measured by

(A)Porometer (B)Potometer

(C)Calporimeter **(D)**Conductivity meter

5. Grassland of Asia are

(A)Savannah (B)Pampas

(C) Steppes (D)Veldt

6. Which one of the following is a partial root parasite?

(A)*Balanophora* **(B)***Santalum*

(C)*Viscum* (D)*Cuscuta*

7. Population was termed as self-perpetuating unit by

(A) Malthus (B) Spencer

(C) Mobius (D) Odum

8. *Viscum* is

(A) Partial root parasite **(B)** Partial stem parasite

(C) Total stem parasite (D) Total root parasite

9. Instrument used for measuring wind velocity is

(A) Anemometer (B) Hydrometer

(C) Lactometer (D) Photmeter

10. An obligate root parasite is

(A) *Viscum* (B) *Striga*

(C) *Loranthus* **(D)** *Rafflesia*

11. Plants growing under average conditions of temperature and moisture are

(A) Hygrophytes **(B)** Mesophytes

(C) Hydrophtes (D) Epiphytes

12. Halopytes are

(A) Salt resistant (B) Fire resistant

(C) Cold resistant (D) Sand loving

13. Which pair is mismatched?

(A) Tundra—Permafrost

(B) Savannah—*Acacia* trees

(C) Parties—Epiphytes

(D) Coniferous forest—Evergreen trees

14. Which one is a correct matching of plant, its habitat and the forest type where it normally occurs?

(A) *Prosopis—tree*—scrub

(B)Saccharum—grass—forest

(C)shorea robusta—herb—tropical rain forest

(D)*Acacia catechu*—tree—coniferous forest

15. Plants growing in saline soil/high concentration of salts are

(A)Xerophytes **(B)**Halophytes

(C)Heliophytes (D)Hydrophytes

16. Praying Mantis is a good example of

(A) Camouflage (B)Warning colourtion

(C)Mullerian mimicry (D)Social insect.

17. *Santalum aluml* Sandal wood Tree is

(A) Partial root parasite

(B)Partial stem parasite

(C)Total stem parasite

(D)Total root parasite

18. Psammophytes are plants growing on soil

(A)A lluvial **(B)**Sandy

(C)Alkaline (D)Acidic

19. Total root parasite is

(A) *Rafflesia* (B)*Cassytha*

(C)*Viscum* (D)*Loranthus*

20. Consequences of population explosion were explained for the first time by

(A)Darwin (B)De Vries

(C)Lamarck **(D)**Malthus

21. Aerenchyma occurs in

(A)Epiphytes (B)Halophytes

(C) Hydrophytes (D)Xerophytes

22. Ephermerals are a type of xerophytes

(A) Drought escaping (B)Drought resisting

(C)Parasitism (D)None of the above

23. Association between Barnacles and whale *Limulus* is

(A)Symbiosis **(B)**Commensalism

(C)Parasitism (D)Predatorship

24. Plants growing on sandy soils are

(A) Oxylophytes (B)Psammophytes

(C)Psychrophtes (D)Lithophytes

25. Maximum survival and reproductive capacity shown by a

(A)Carrying capacity (B)Natality

(C) Biotic potential (D)Vitality

26. An unrestricted or maximum reproductive capacity is called

(A)Birth rate **(B)**Biotic potential

(C)Carrying capacity (D)Fertility

27. Actively moving organisms in aquatic ecosystem are

(A)Benthos (B)Zooplankton

(C)Phytoplankton **(D)**Nekton

28. Resemblance of an organisms to another for protection and hiding is

(A)Camouflage **(B)**Mimicry

(C)Predation (D)Adaption

29. Best method to solve population problem in India is a

(A)Increase food production

(B)Increase medical facilities

(C) Reduce birth rate

(D)Conserve natural resources

30. *Hydrilla* is

(A)Phytoplankton (B)Floating hydrophyte

(C) Submerged hydrophyte (D)Amphibian

31. Fresh water bony fishes maintain water balance by

(A) Excreting hypotonic urine

(B)Excreting wastes as uric acid

(C)Drinking small amount of water

(D)Excreting salt across their gills

32. A class with the largest number of animals is

(A)Mammalia **(B)**Insecta

(C)Reptilia (D)Pisces

33. In *Opuntia*, the spines are modifications of

(A)Stems **(B)Leaves**

(C)Roots (D)None of the above

34. Leaves are changed into spines in xerophytic structures called

(A)Phyllode (B)Cladode

(C)Phylloclade (D)All the above

35. Which among the following is monocarpic?

(A)Coconut (B)Apple

(C)Bamboo/Agave (D)Mango

36. Which two of the following changes (a—d) usually tend to occur in plain dwellers when they move to higher altitudes (3500 m or more)?

(a)Increase in red blood cell size

(b)Increase in red blood cell production

(c)Increase in breathing rate

(d)Increase in thrombocyte rate

(A)c and d (B)a and d

(C)a and b **(D)b and c**

37. Mountain sickness at high altitude is due to

(A)Excess CO_2 in air

(B)Decrease CO_2 in air

(C)Decrease partial pressure of oxygen

(D)Decrease efficiency of haemoglobin

38. At high altitude, RBCs of human blood will

(A)Increase in number (B)Decrease in number

(C)Decrease in size (D)Increase in size

39. People living at sea level have around 5 million RBCs/mm^3 of blood whereas those living at an altitude of 5400 m have around 8 million. This is due to

(A)There is more UV radiation which enhances RBCs production

(B)People eat more nutritive food which helps in formaion of more RBCs

(C)People get pollution free air to breathe with more oxygen becoming available

(D) Atmosphereic O_2 level is less so that more RBCs are needed to absorb the required amount of O_2 to survive

40. Many fresh water animals cannot live for long in sea water and vice versa mainly because of

(A)Change in nitrogen level

(B)Change in thermal tolerance

(C)Variation in light intensity

(D) Osmotice problems

41. Which are true about the following statement about kangaroo rats?

(a)They have dark colour, high rate of reproduction and excrete solid urine

(b)They do not drink water, breathe at slow rate, and have their body covered with thick hair

(c)The food on dry seeds and do not require drinking water

(d)They excrete very concentrated urine and do not use water to regulate body temperature

(A)c and a (B)a and b

(C)c and d (D)b and c

42. Water holding capacity is highest in

(A)Sandy soil (B)Silt soil

(C) Clay soil (D)Loam soil

43. Soil water available to roots is

(A)Surface water (B)Hygroscopic water

(C)Gravitational water **(D)**Capillary water

44. During extreme aridity, Desert Rat

(A)Stores water **(B)**Uses metabolic water

(C)Saves water (D)Does not use wate

45. According to Allen's Rule, the mammals from colder cliamtes have

(A)Shorter cars and longer limbs

(B)Longer ears and shorter limbs

(C)Longer ears and longer limbs

(D) Shorter ears and shorter limbs

46. Trophical forests occur in India

(A)Jammu and Kashmir

(B)Rajasthan

(C) Kerala and Assam

(D)The forests do not occur in India

47. Carryingt capacity is determined by

(A) Limiting resources

(B)Morality rate

(C)Natality rate

(D)Predation

48. Each environment can support a limited population depending upon its

(A)Biotic potential

(B) Carrying capacity

(C)Natality

(D)Reproductive potential

49. Population daya is

(A)5th may **(B)**11th July

(C)December 1 (D)21st August

50. Competition is the most serve between two

(A)Closely related species growing in different niches

(B) Closely related species growing in the same habitat

(C)Distantly related species growing in the same habitat

(D)Distantly related species growing in different niches