

1. In phylogenetic system of classification of plants, which is the most primitive family (among angiosperms—dicotyledons)?
 - (A) Magnoliaceae
 - (B) Orchidaceae
 - (C) Asteraceae
 - (D) Acanthaceae
2. In Botany, which is called an inflorescence?
 - (A) A mechanism through which pollination takes place in plants
 - (B) A type of floricultural practice
 - (C) A group or cluster of flowers arranged on a plant's stem that is composed of a main branch or a system of branches
 - (D) A definite type of arrangement of petals in a flower
3. The Central Zoo Authority (CZA) was established under which Act?
 - (A) The Biological Diversity Act, 2002
 - (B) The Wildlife (Protection) Act, 1972
 - (C) The Environment Protection Act, 1986
 - (D) The Forest Conservation Act, 1980
4. The 'pH' of soil indicates
 - (A) salinity of soil only
 - (B) acidity or alkalinity of soil
 - (C) organic matter content
 - (D) soil porosity
5. How many elephant reserves officially notified in Assam?
 - (A) 3
 - (B) 4
 - (C) 5
 - (D) 6
6. The Indian rhinoceros (*Rhinoc unicornis*) is listed under which category of IUCN Red List?
 - (A) Vulnerable
 - (B) Endangered
 - (C) Critically endangered
 - (D) Near threatened
7. In the Wildlife Protection Amendment Act, 2022, the number of schedules have rationalized to
 - (A) Schedule I to V
 - (B) Schedule I to VI
 - (C) Schedule I to III + IV (Schedule)
 - (D) Schedule I and II only

8. CITES is the abbreviated form of

- (A) Convention on Internationally Threatened Endangered Species of Wild Fauna and Flora
- (B) Conservation of Internationally Threatened Endemic Species of Wild Fauna and Flora
- ☒ (C) Convention on International Trade in Endangered Species of Wild Fauna and Flora
- ☒ (D) Convention on Internationally Threatened Endangered Species of Agricultural Crop

9. Bamboo belongs to which family?

- (A) Fabaceae
- ☒ (B) Poaceae ✓
- (C) Meliaceae
- (D) Dipterocarpaceae

10. Which Act provides the legal framework for declaring Eco-Sensitive Zones (ESZs)?

- (A) The Air Act, 1981
- (B) The Environment (Protection) Act, 1986
- (C) The Forest Rights Act, 2006
- (D) The Wildlife (Protection) Act, 1972

11. The Schedule III of the Wildlife (Protection) Act, 1972 (as amended in 2022) includes

- (A) specified mammals
- (B) specified birds
- (C) specified herpetofauna
- ☒ (D) specified plants ✓

12. Hoolock gibbon is the only ape found in India. The colour of the adult Hoolock gibbon is black. What is the colour of female adult Hoolock gibbon found in Assam?

- (A) Grey ✓
- (B) Tanned copper
- ☒ (C) Black ✓
- ☒ (D) White ✓

13. Flowering plants having unisexual (male or female) flowers on separate individual plant are known as

- (A) monoecious plant
- (B) dioecious plant
- ☒ (C) deciduous plant ✓
- (D) None of the above

14. Primary succession on bare rock is termed as

- (A) xerosere
- (B) lithosere
- ☒ (C) hydrosere ✓
- ☒ (D) psammosere ✓

15. Acid rain is mainly caused by the emission of
- CO_2 and CH_4
 - SO_2 and NO_x
 - O_3 and CFCs
 - CO and CO_2
16. Pneumatophores are found in
- lithophytes
 - xerophytes
 - mangroves
 - epiphytes
17. Where does the term 'phyllotaxy' used?
- The term is used to describe the arrangement of flowers in plant
 - The term is used to describe the arrangement of leaves around the stem
 - The term is used to describe the different forest types
 - The term is used to describe the different stages of succession
18. Which of the following are different types of aestivation?
- Hypanthodium, Head (Capitulum), Umbel
 - Valvate, Twisted, Imbricate
 - Alternate, Opposite, Whorled
 - Marginal, Basal, Free Central
19. The 'hypogeal germination' of seeds means
- cotyledons remain below the ground
 - cotyledons come above the ground
 - no cotyledon is formed
 - both cotyledons and plumule emerge
20. The outermost covering of a seed is called
- endosperm
 - cotyledon
 - seed coat
 - pericarp
21. Which elephant reserve in Assam is linked to Manas Tiger Reserve and Bhutan's forest landscape?
- Sonitpur Elephant Reserve
 - Kaziranga-Karbi Anglong Elephant Reserve
 - Chirang-Ripu Elephant Reserve
 - Dhansiri-Lungding Elephant Reserve

22. The study of freshwater ecosystem is called

- (A) limnology
- (B) oceanography
- (C) hydrobiology
- (D) aquatic ecology

23. Natality refers to

- (A) birthrate
- (B) death rate
- (C) growth rate
- (D) population density

24. Which scientific method is the primary tool for estimating tiger populations in India?

- (A) Line transect method
- (B) Camera trapping and mark-recapture
- (C) Direct sighting count
- (D) Radio telemetry only

25. Which of the following are the tiger reserves in Assam?

- (A) Manas, Nameri, Kaziranga, Dibru-Saikhowa
- (B) Manas, Orang, Raimona, Kaziranga
- (C) Kaziranga, Dehing-Patkai, Orang, Manas
- (D) Manas, Nameri, Kaziranga, Orang

26. The NGO associated with Assam Forest Department in managing the Centre for Wildlife Rehabilitation and Conservation (CWRC) in Panbari, Kaziranga is

- (A) WWF
- (B) WWT
- (C) WTI
- (D) Aaranyak

27. The term 'basal area' refers to

- (A) cross-section area of stem at breast height
- (B) crown spread of a tree
- (C) area covered by roots
- (D) average bole length

28. The practice of raising forest crops and managing them is called

- (A) dendrology
- (B) silviculture
- (C) agroforestry
- (D) arboriculture

29. A species of animal or plant which is not native and whose introduction or spread may threaten or adversely impact wildlife or its habitat is called

- (A) exotic species
- (B) invasive alien species
- (C) indigenous species
- (D) weed

30. As per the Wildlife (Protection) Act, 1972, 'wildlife' includes

- (A) only the animals found in national parks, wildlife sanctuaries and tiger reserves
- (B) any animal, aquatic or land vegetation, which forms part of any habitat
- (C) any mammalian species, aves, herpetofauna and pieces
- (D) only animal listed in Schedule I to IV of the Wildlife (Protection) Act, 1972

31. The author of the book, *Flora of Assam, Vol-V*, which deals with Gramineae, is

- (A) Cap. Kingdon-Ward
- (B) V. Narayanaswami
- (C) N. L. Bor
- (D) C. E. Hubbard

32. The loss or excretion of water in the form of liquid droplets from the leaves and other parts of an intact plant is called

- (A) transpiration ✓
- (B) guttation ✓
- (C) precipitation
- (D) evaporation

33. The upward movement of water from the root towards the top of the plant is known as

- (A) ascent of sap
- (B) guttation
- (C) imbibition
- (D) osmosis

34. The study of interactions between climate and vegetation is called

- (A) synecology
- (B) autecology
- (C) phenology
- (D) climatology

35. Mental illness of captive wild animals caused by the stress of captivity is known as

- (A) zoonosis
- (B) zoochosis
- (C) schizophrenia
- (D) salmonellosis

36. There are some animals that are mainly active in the daytime, some are mainly active during night, some are primarily active during twilight hours, at dawn and dusk and some are active during both the day and night. The animals which are mainly active during daytime is called

- (A) cathemeral
- (B) crepuscular
- (C) diurnal
- (D) nocturnal

37. The
is e

(A)

(B)

(C)

38.

39.

37. The 'National Biodiversity Authority' is established under the provision of
- (A) the Wildlife (Protection) Act, 1972
 - (B) the Biological Diversity Act, 2002
 - (C) the National Green Tribunal Act, 2010
 - (D) the Environment (Protection) Act, 1986

38. An unseasonable yellowing of foliage, symptomatic of a chlorophyll deficiency in the leaf tissues under normal light conditions is known as

- (A) chlorosis
- (B) necrosis
- (C) etiolation
- (D) mosaic disease

39. The annual increase in volume of a tree or forest is termed as

- (A) rotation
- (B) increment
- (C) yield
- (D) coppice

40. The Indian Council of Forestry Research and Education (ICFRE) has its headquarters at

- (A) Dehradun
- (B) Jabalpur
- (C) Bengaluru
- (D) Bhopal

41. The Kyoto Protocol was adopted in which year?

- (A) 1992
- (B) 1997
- (C) 2001
- (D) 2005

42. The Kyoto Protocol is linked to which international agreement?

- (A) Paris Agreement
- (B) Montreal Protocol
- (C) UNFCCC (United Nations Framework Convention on Climate Change)
- (D) Ramsar Convention

43. The process by which communities change in structure and composition of vegetation over time is known as

- (A) adaptation
- (B) evolution
- (C) ecological succession
- (D) coevolution

44. The Montreal Protocol (1987) was designed to address which ecological event?

- (A) Global warming
- (B) Ozone depletion
- (C) Acid rain
- (D) Deforestation

45. 'World Wetlands Day' is celebrated every year to mark the date of the adoption of the Convention on Wetlands, 1971, in the Iranian City of Ramsar. On which date is the 'World Wetlands Day' celebrated?
- (A) 12th January
 - (B) 2nd February ✓
 - (C) 22nd April
 - (D) 16th September
46. Periodic movement of individual or groups of animals and birds between two geographic regions in response to various stimuli is known as
- (A) tropism
 - (B) nastic movement
 - (C) migration ✓
 - (D) tectonic shift
47. As per the International Code of Nomenclature for algae, fungi, and plants, the one specimen or illustration indicated as the nomenclatural type by the author(s) of a name of a new species is called holotype. What is the duplicate specimen of the holotype called?
- (A) Isotype
 - (B) Syntype
 - (C) Paratype
 - (D) Lectotype
48. Association between the roots of higher plants and a fungus in the nature of symbiosis is known as
- (A) tylosis
 - (B) mycorrhiza ✓
 - (C) conjugation
 - (D) epiphyte
49. An intense form of soil erosion that creates large, deep channels in the landscape caused by surface water runoff is known as
- (A) geological erosion ✓
 - (B) gully erosion
 - (C) sheet erosion
 - (D) stream bank erosion
50. The branch of forestry which deals with the determination of dimensions (e.g., diameter, height, volume, etc.), form, volume, age and increment of single tree, stand or whole woods, either standing or after felling, is called
- (A) metrology
 - (B) forest mensuration
 - (C) forest inventory ✓
 - (D) silviculture

51. Buttress in trees means

(A) specialized roots that grow vertically downwards from heavy, horizontal branches of large trees

(B) an outgrowth from the base of the tree connecting it with the roots ✓

(C) callus formation, i.e., the growth of a mass of undifferentiated cell ✓

(D) trees having disease ✓

52. Which one is the State tree of Assam?

(A) *Dipterocarpus turbinatus*

(B) *Dipterocarpus retusus*
(synonym : *D. macrocarpus*)

(C) *Dipterocarpus indicus*

(D) *Dipterocarpus bourdillonii*

53. Hypsometer is an instrument

(A) used for determining the age of a tree ✓

(B) used for calculating the crown cover of a tree from satellite imagery ✓

(C) used for determining the height of standing trees from observations taken at some distance from the tree ✓

(D) used for navigating a radio-collared animal ✓

54. Which of the following endemic species has been successfully bred in captivity in Assam and also successfully reintroduced in its natural habitat in Assam?

(A) White-winged wood duck

(B) Elephant

(C) Pygmy hog

(D) Hispid hare

55. A plant whose normal habitat is neither very wet nor very dry is known as

(A) xerophyte ✓

(B) hydrophyte ✓

(C) lithophyte ✓

(D) mesophyte ✓

56. The soil with highest water-holding capacity is

(A) sandy soil

(B) clay soil

(C) loamy soil

(D) gravel soil

57. The phenomenon of liberation of energy from organic substances in catabolic process is described as

(A) photosynthesis ✓

(B) respiration ✓

(C) transpiration ✓

(D) guttation

58. Nambor-Doigrung Wildlife Sanctuary is situated in which forest division in Assam?
- Jorhat Forest Division
 - Golaghat Forest Division
 - Dibrugarh Forest Division
 - Karimganj Forest Division
59. In which of the national parks of Assam is the tree species Hollong (the State tree of Assam) predominantly available?
- Nameri National Park
 - Dehing-Patkai National Park
 - Manas National Park
 - Orang National Park
60. In which district of Assam is the Nameri National Park situated?
- Udalguri
 - Sonitpur
 - Biswanath
 - Darrang
61. The word 'vernalization' refers to the process by which
- the diseases of plants are treated
 - the plants response to the relative lengths of light and darkness to initiate flowering
 - the plants produce their food in absence of sunlight
 - the plants require a period of cold exposure to initiate flowering
62. Which of the following is a suitable example of ex-situ conservation?
- National park
 - Community reserve
 - Zoo
 - Sacred groove
63. Under the provision of the Wildlife (Protection) Act, 1972, the Central Government constitutes a body known as the National Tiger Conservation Authority to exercise the powers conferred on, and to perform the functions assigned to it. Who is the Chairperson of the National Tiger Conservation Authority as per the Act?
- The Prime Minister
 - The Minister in Charge of the Ministry of Environment and Forests
 - Secretary, the Ministry of Environment and Forests
 - Director General of Forests and Special Secretary, the Ministry of Environment and Forests
64. The Wildlife (Protection) Act, 1972 has been amended in the years 1982, 1986, 1991, 1993, 2002, 2006 and 2022. In which amendment of the Wildlife (Protection) Act, 1972 was the National Tiger Conservation Authority (NTCA) established?
- 1993
 - 2002
 - 2006
 - 2022

65. The maximum area of forest land that can be recognized for individual rights under FRA is
- (A) 2 hectares
 - (B) 4 hectares
 - (C) 6 hectares
 - (D) No limit
66. Who is the Chairperson of the National Board for Wildlife as per the Wildlife (Protection) Act, 1972 (as amended up to date)?
- (A) The Prime Minister
 - (B) The Minister in Charge of the Ministry of Environment and Forests
 - (C) The Minister of State in the Ministry of Environment and Forests
 - (D) Director General of Forests and Special Secretary, the Ministry of Environment and Forests
67. Which remote sensing technique is primarily used by FSI for assessing forest cover?
- (A) RADAR
 - (B) LIDAR
 - (C) Satellite imagery
 - (D) Drone mapping
68. Which of the following is not a 'Protected Area' within the framework of the Wildlife (Protection) Act, 1972?
- (A) National park
 - (B) Sanctuary
 - (C) Elephant reserve
 - (D) Community reserve
69. Which of the following is not a principle which forms the very basis of the system of nomenclature as per the International Code of Nomenclature for algae, fungi and plants?
- (A) The application of names of taxonomic groups is determined by means of nomenclatural types
 - (B) The nomenclature of a taxonomic group is based upon priority of publication
 - (C) Botanical nomenclature is dependent on zoological nomenclature
 - (D) Scientific names of taxonomic groups are treated as Latin regardless of their derivation
70. Which is not a seasoning defect in wood?
- (A) Knot
 - (B) Split
 - (C) Cup
 - (D) Twist
71. The branch of surveying which deals with the determination of relative heights or elevations of various points or objects on the earth's surface is known as
- (A) levelling
 - (B) plane table surveying
 - (C) contouring
 - (D) traversing

72. The International Day of Forests is celebrated on
 (A) March 21st ✓
 (B) February 2nd
 (C) April 22nd
 (D) June 5th
73. There are two biosphere reserves in Assam. These are
 (A) Kaziranga and Manas
 (B) Manas and Dibru-Saikhowa
 (C) Orang and Nameri
 (D) Manas and Orang
74. Out of the following primate species, which one is not found in Assam?
 (A) Bonnet macaque
 (B) Pig-tailed macaque
 (C) Stump-tailed macaque
 (D) Rhesus macaque
75. Which one is the correct order of IUCN Red List categories used for setting conservation priority?
 (A) Least concern—Near threatened—Vulnerable—Endangered—Critically endangered ✓
 (B) Least concern—Vulnerable—Near threatened—Endangered—Critically endangered
 (C) Near threatened—Least concern—Endangered—Vulnerable—Critically endangered
 (D) Least concern—Near threatened—Endangered—Vulnerable—Critically endangered
76. Which of the following is/are not an example(s) of *ex-situ* conservation?
 (A) Zoo and botanical garden
 (B) Tissue culture gene bank
 (C) Arboretum
 (D) Biosphere reserve
77. Which of the following is not included within the definition of zoo as per the Wildlife (Protection) Amendment Act, 2022?
 (A) An establishment where captive animals are kept for exhibiting to the public
 (B) A circus where captive animals are kept for exhibiting to the public
 (C) Off exhibit facilities such as rescue centres and conservation breeding centres
 (D) An establishment of a licensed dealer in captive animals
78. The System of Binomial Nomenclature was introduced by
 (A) Aristotle
 (B) Carolus Linnaeus ✓
 (C) Charles Darwin
 (D) Ernst Haeckel

79. The study of fossils is called

- (A) ontogeny
- (B) phylogeny
- (C) palaeontology ✓
- (D) anthropology ✓

80. Abney's level is used for measuring

- (A) height and contouring
- (B) diameter of a tree
- (C) basal area of a tree
- (D) None of the above

81. 'National parks' created under the Wildlife (Protection) Act, 1972 are examples of

- (A) *in-situ* conservation
- (B) *ex-situ* conservation
- (C) rescue centre or zoo
- (D) None of the above

82. Gibbon Wildlife Sanctuary has seven different primate species. Out of the following, which primate species is not found in Gibbon Wildlife Sanctuary?

- (A) Stump-tailed macaque ✓
- (B) Hoolock gibbon ✓
- (C) Golden langur ✓
- (D) Capped langur ✓

83. Which of the following international agreements is specifically aimed at reducing greenhouse gas emissions?

- (A) Ramsar Convention ✓
- (B) Kyoto Protocol
- (C) Montreal Protocol
- (D) Stockholm Convention

84. Which one is the State Flower of Assam?

- (A) *Rhynchosyilis coelestis*
- (B) *Rhynchosyilis retusa*
- (C) *Rhynchosyilis cymifera*
- (D) *Rhynchosyilis gigantea*

85. What does glabrous mean in Botany?

- (A) A leaf surface devoid of hair
- (B) An oval-shaped leaf structure
- (C) Insectivorous characteristic of a plant
- (D) Variegated colour of leaves

86. Pick the right sequence of taxonomic categories.

- (A) Division—Class—Family—Tribe—Order—Genus—Species
- (B) Division—Class—Family—Order—Tribe—Genus—Species
- (C) ✓ Division—Class—Order—Family—Tribe—Genus—Species
- (D) Division—Order—Class—Family—Genus—Tribe—Species

87. What does the word 'biosphere' refer to?

(A) A landmass having endangered species

(B) The earth as an ecosystem

(C) A forest area that requires immediate conservation strategy ✓

(D) A natural tourist destination ✓

88. By which Constitutional Amendment Act were 'forests' transferred from the State List to the Concurrent List?

(A) The 24th Amendment Act, 1971

(B) The 42nd Amendment Act, 1976

(C) The 44th Amendment Act, 1978

(D) The 73rd Amendment Act, 1992

89. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act was enacted in which year?

(A) 1996

✓ (B) 2006

(C) 2002

(D) 2010

90. Which of the following are greenhouse gases covered under the Kyoto Protocol?

(A) CO_2 , CH_4 , N_2O , HFCs, PFCs, SF_6 ✓

(B) CO_2 , CO , H_2O , SO_2 , C_2H_4 , PFCs

(C) CO , H_2O , N_2O , HFCs, C_2H_4 , SF_6 ✓

(D) CO_2 , CH_4 , N_2O , C_2H_4 , PFCs, H_2O ✓

91. Out of the following primate species, which one is endemic to Assam and Bhutan?

(A) Hoolock gibbon

(B) Phayre's leaf monkey ✓

✓ (C) Golden langur

(D) Pig-tailed macaque ✓

92. IUCN is the abbreviated form of

(A) Indian Union for Conservation of Nature

(B) International Urgency for Conservation of Nature

✓ (C) International Union for Conservation of Nature

(D) International Urgency for Conservation Need

93. 'Van Mahotsav' is celebrated during the period from
- 1st to 7th July
 - 1st to 7th June
 - 5th to 12th June
 - 21st to 27th March
94. Which of the following is a key characteristic of a riparian forest?
- Located in arid, desert-like regions
 - Found along the banks of rivers and streams ✓
 - Dominated by coniferous trees
 - Characterized by high fire frequency
95. Which one of the following species does not belong to the family Poaceae?
- Bambusa balcooa* ✓
 - Dendrocalamus hamiltonii* ✓
 - Melocanna baccifera*
 - Cyperus brevifolius*
96. What does an endemic species refer to?
- A species with a wide distribution
 - A species found only in a specific area
 - A species that has become extinct
 - A species that migrates seasonally
97. In-situ conservation of biodiversity includes
- botanical gardens
 - zoos
 - national parks and wildlife sanctuaries
 - gene banks
98. The arrangement of leaves on a stem is called
- phyllotaxy
 - vernation ✓
 - venation ✓
 - placentation ✓
99. Under FRA, rights can be claimed by Scheduled Tribes and other traditional forest dwellers provided, they were residing in forest and depending on it before which cut-off date?
- 1st January, 1950
 - 15th August, 1947
 - 1st July, 2006
 - 13th December, 2005
100. The International Day for Biological Diversity is observed on
- 2nd February ✓
 - 22nd May ✓
 - 11th December
 - 21st September ✓