

26. Pruning, thinning and weeding are:
- Basically artificial activities based on human research
 - Natural phenomenon**
 - Learnt from USA
 - Learnt from animals
27. Removal of soil with flowing water is known as:
- Water erosion**
 - Wind erosion
 - Ground erosion
 - a and c
28. An area less deep than wide which drains out surplus water into a nearby canal or stream is known as:
- Catchment area
 - Watershed area
 - a & b**
 - None of above
29. Cambium, in plants is responsible for
- Primary growth
 - Secondary growth**
 - Sudden growth
 - a and b
30. The central core of tree stem is known as:
- Sap wood
 - Raw wood
 - Heart wood**
 - Fuel wood
31. Soft wood is wood of:
- Broad leaved trees
 - Coniferous trees**
 - Populus deltoids*
 - Bombax ceiba*
32. A tree which moves to and fro with blowing wind is known as:
- Dominant tree
 - Sub-dominant tree
 - Wolf tree
 - Whip tree**
33. A tree with stunted growth is known as :
- Diseased tree
 - Common tree
 - Co-dominant tree
 - Dwarf tree**
34. In shelterwood system, all the trees are :
- Removed in one installment
 - Removed in more than one installments**
 - Covered with large polythene sheets
 - None of the above
35. The silvicultural system which provides both timber and fuelwood side by side is:
- Clear felling system
 - Shelterwood system
 - Selection wood system
 - Coppice with standard silvicultural system**
36. Pruning should be carried out when branches are:
- Less than thumb thickness**
 - Equal to wrist thickness
 - More than wrist thickness
 - Dead
37. Removal of undesirable woody plants from the forest is known as:
- Weeding
 - Cleaning**
 - Shifting
 - Felling
38. MAI stands for:
- Million annual increments
 - More annual increment
 - Multi annual increment
 - Mean annual increment**
39. All the operations from seed sowing up to harvesting of tree are collectively known as:
- Sericulture
 - Apiculture
 - Silviculture**
 - Lac-culture
40. Botanical name of Neem is:

- a. *Melia azedrach* b. *Prosopis cineraria* **c. *Azadirachta indica*** d. *Tamarix aphylla*
41. Removal of branches from the tree while taking care of its health is called:
 a. Pruning **b. Pollarding** c. Silviculture d. Topping
42. Removal of braches from the tree without any respect to its health is called:
 a. Cleaning b. Logging **c. Lopping** d. Harvesting
43. Shifting of plants from nursery to the field is known as:
 a. Planting **b. Transplanting** c. Movement d. Removal
44. Root pruning promotes:
 a. Tap roots **b. Adventitious roots** c. a and b d. None of the above
45. Following trees are suitable for desert conditions
 a. *Prosopis cineraria* b. *Salvadora oleides* c. *Acacia nilotica* **d. a, b and c**
46. Annual rings indicate:
 a. Diameter of tree b. Strength of wood **c. Age of tree** d. Price of tree
47. Twigs are smaller than:
 a. Branches b. Limbes c. Stem **d. a, b and c**
48. Which tree species has relatively less height:
 a. *Azadirachta indica* b. *Dalbergia sissoo*
c. *Melia azedrach* d. *Eucalyptus camaldulensis*
49. A land supporting forest or reserved forest is:
 a. Farmland b. Tree land **c. Forest land** d. Forest
50. Botanical name of Willow is:
 a. *Populus deltoids* b. *Bombax ceiba*
c. *Salix tetrasperma* d. *Erythrina suberosa*
51. CCF stands for:
 a. Chief Controller of forests b. Chief Captain of forests
c. Chief Conservator of forests d. All above are wrong
52. Range Forest Officer is also known as:
 a. Forest Range Officer b. Block Officer c. Forest Guard **d. Forest Ranger**
53. Xylem in plants is responsible for:
 a. Movement of food **b. Movement of water and minerals**
 c. Movement of waste products d. Resistance against diseases
54. Rotation of *Dalbergia sissoo* for best quality timber is:
 a. 12 years b. 22 years c. 44 years **d. 66 years**
55. Rotation of *Eucalyptus camaldulensis* with respect to MAI is:

- a. **6 years** b. 12 years c. 18 years d. 24 years
56. Banana is a:
- a. Tree b. Shrub **c. Herbaceous plant** d. Grass
58. Following is a very important medicinal plant found in Balochistan:
- a. *Juniperous excels* b. *Olea ferrugenia* c. *Dodonea viscosa* **d. *Ephedra species***
59. The height of sub-tropical broad leaved evergreen scrub forests above sea level is:
- a. 500-1500 feet b. 1500-2500 feet c. 2500-3500 feet **d. 3500-5500 feet**
60. PARB is:
- a. Pakistan agriculture research board **b. Punjab agriculture research board**
c. Pakistan agriculture research bulletin d. Punjab agriculture research bulletin
61. The height of temperate forests above sea level is:
- a. 6500-7500 feet b. 6500-8500 feet **c. 6500-11000 feet** d. 6500-13000
61. The study of individual tree with respect to its environment is known as:
- a. Autecology** b. Synecology c. Pathology d. Eco-toxicology
62. A transition zone among two ecosystems is called:
- a. Ecotourism b. Forest ecosystem **c. Ecotone** d. Ecophyll
63. Loss of water from plant leaves is called:
- a. Evaporation **b. Transpiration** c. Extirpation d. Oxidation
64. Green leafy material applied to soil to improve its fertility is called:
- a. **Green manure** b. Forage c. Fodder d. Green biomass
65. The animals which feed on plants as well as on meat are called:
- a. Herbivores b. Carnivores **c. Omnivores** d. Folivores
66. The plant material fallen on forest floor such as twigs, branches, leaves etc is called;
- a. Humus b. Fertilizer **c. Litter** d. Husk
67. A forest having all trees of same species is called:
- a. Mixed forest **b. Pure forest** c. Poor forest d. Clean forest
68. A forest having all trees of same age is called:
- a. Uniform forest b. Natural forest **c. Even-aged forest** d. Uneven-aged forest
69. Woody vegetation having some forage value is known as:
- a. **Browse** b. Fodder c. Canopy d. Biomass
70. The environmental factors related to forest fire are known as:
- a. Edaphic factors b. Physiographic factors **c. Pyric factors** d. Biotic factors
71. Edaphic factors are related to:
- a. Pollution b. Air **c. Soil** d. Water

72. Plants are also known as:
- a. Fauna b. Tundra **c. Flora** d. Shrubs
73. Harvesting of trees at the end of rotation is:
- a. Topping b. Lopping **c. Felling** d. Training
74. The best planting method for waterlogged soils is
- a. Pit planting **b. Mound planting** c. Berm planting d. Dibble planting
75. The nursery directly grown in the soil bed is known as:
- a. Field nursery b. Open nursery **c. Bed nursery** d. Plantation
76. Compact plantation is also called as:
- a. Linear plantation b. Shelter belts **c. Block plantation** d. Irrigated plantation
77. Loss of leaves in trees is called:
- a. Diffusion b. Reduction **c. Defoliation** d. Succession
78. Opposite of succession is called:
- a. Secondary succession b. Tertiary succession c. Retention **d. Retrogression**
79. Resin is obtained from
- a. Poplar b. Chilgoza **c. Chirpine** d. Walnut
80. Animals feeding on dead animals are:
- a. Primary consumers d. Secondary consumers **c. Scavengers** d. Beasts
81. Burning of litter and brushwood lying on forest floor is called:
- a. Crown fire b. Soil fire **c. Surface fire** d. Low level fire
82. Tree stem is also known as
- a. Bole b. Trunk **c. a and b** d. None of the above
83. The plants which are highly drought resistant are known as:
- a. Hydrophytes b. Mesophytes **c. Xerophytes** d. Halophytes
84. Tables which give volumes of logs for different values of tree diameter and length are known as:
- a. Log tables b. Diameter tables **c. Volume tables** d. Yield tables
85. The art and science of rearing silkworm is known as:
- a. Silviculture b. Apiculture **c. Sericulture** d. Aquaculture
86. Final stage vegetation of an ecosystem is known as:
- a. Sub-climax vegetation **b. Climax vegetation** c. Top vegetation d. Scrub vegetation
87. Forest growing along riverside is known as:
- a. **Riverain/bela forest** b. Alpine forest b. Sub-alpine forest c. River forest
88. Material produced by living organisms is known as:
- a. Living material **b. Biomass** c. Living mass d. Humus

89. Ratoon crop of trees is called:
- a. Stump b. Seedling c. Sapling **d. Coppice**
90. Trees with naked seeds are called:
- a. Mountainous fruit plant **b. Gymnosperms** c. Dry fruit plants d. Angiosperms
91. Plants that grow in water or wet places are known as:
- a. Mesophytes b. Xerophytes **c. Hydrophytes** d. Wet plants
92. GBH is:
- a. **Girth at breast height** b. Girth below height
c. Girth between heights d. None of the above
93. Layer of litter that is spread artificially on soil to cut down evaporation is called:
- a. Biomass b. Humus **c. Mulch** d. Organic fertilizer
94. Removal of branches before felling is called:
- a. Lopping **b. Topping** c. Pollarding d. Shifting
95. To provide mechanical support to weak tree seedlings is called:
- a. Stacking **b. Staking** c. Tiding d. Supporting
96. Higher water table which disturbs/stops respiration in plants is known as:
- a. **Waterlogging** b. Water harvesting c. Water storing d. Water removal
97. The soils in which clay particles make 35% or more of total weight are known as:
- a. **Hard clayey soils** b. Clay loam soils c. Clay silt soils d. Sandy clayey soils
98. Monsoon season is in the months of:
- a. Feb-March **b. July-August** c. August-September d. Nov-December
99. The process of drying the wood before use is called:
- a. Preservation **b. Seasoning** c. Drying d. None of the above
100. To through away wood logs in water for some time is known as:
- a. Preservation** b. Seasoning c. Wetting d. Floating
101. Salt tolerant plants are:
- a. Halophyte** b. Mesophyte c. Eqiphyte d. Xerophytes
102. *Dalbergia sissoo* is the principal species in:
- a. Irrigated Plantations** b. Bela Forest c. Tropical Forest d. Scrub Forest
103. Resin is obtained from:
- a. *Pinus roxburghi*** b. *Acacia nilotia* c. *Salix tetrosperma* d. *Cedrus deodara*
104. Common Name of *Cenchrus ciliaris* is:
- a. Gorkha grass b. Khabbal grass **c. Dhaman grass** d. Malai grass
105. Rotational age of *Populous deltoides* for max. volume production:

- a. 4 Years b. 6 Years **c. 8 Years** d. 10 Years
106. Number of plants per unit area is known as:
a. diversity **b. density** c. Population d. Vegetation cover
107. Carrying capacity of 56 h/A.u/Year:
a. Very Good b. Excellent **c. Very Poor** d. Fair
108. Air dry forage needed to a buffalo for one day:
a. 9kg b. 15 kg **c. 13.5 kg** d. 1.5 kg
109. Lateral movement of water under the soil surface is:
a. Infiltration b. Seepage **c. Percolation** d. Run off
110. Formation of gentle slope for reducing run off is known as:
a. Dam **b. Dyke** c. Percolation d. Barrage
111. Group of plants growing together is known as:
a. Organization b. Population c. Density **d. Community**
112. Murree Hills forests are located in the region:
a. Dry Temperate **b. Moist Temperate** c. Alpine Climate d. Subtropical Humid
113. Purpose of pruning is to get:
a. Good quality Timber b. More branches c. More height d. More Forage
114. The common name of *Tamarix aphylla* is:
a. Babool b. Jand **c. Frash** d. Shareen
115. Where is juniper forests?
a. Ziarat b. Chechawatni c. Murree d. Balakot
116. What type of famous animal present in Indus river:
a. Crocodile b. Porcupine **c. Dolphin** d. Trout fish
117. Basal area is a cross sectional area of tree stem at a height of:
a. 4.5 meter b. 3.5 meter **c. 4.5 feet** d. 1.5 feet
118. Removal of undesirable woody plants during early stage of forest is known as
a. Weeding b. Logging, c. Lopping **d. Cleaning**
119. Heart Wood means
a. Coniferous Trees b. Wood of broad leaved trees
c. Dead Phloem **d. Dead xylem**
120. What is the main sp. of mangrove forest:
a. *Avicenna marina sp.* b. *Acacia sp.* c. *Rhizophora sp* d. *Cactus sp*
121. Area occupied by rangelands of Pakistan.
a. 42% b. 50% **c. 62%** d. 72%

122. In Range ecosystem natural vegetation is dominated by:
 a. Herbs and shrubs **b. Grasses and herbs** c. Trees and shrubs d. Grasses
123. Losses of solar energy coming from the sun in Range Ecosystem are:
 a. 15% b. 85% c. 90% **d. 99%**
124. The practices essential for obtaining maximum production within existing potential are known as:
 a. Range improvement operations b. Range development operations
 c. **Range management operations** d. None of the above
125. Most common range use intensity is taken as:
 a. 40% b. 50% **c. 60%** d. 70%
126. A cow weighting about _____ Kg and eating 9 kg air dry forage per day is known as an animal unit.
 a. 225kg b. 325kg **c. 425kg** d. 525kg
127. Woody vegetation having some forage value is known as a:
 a. Tree b. Shrub c. Feed **d. Browse**
128. Entire plant with naked roots can be successfully grown.
 a. In monsoon season b. In whole winter season **c. Spring season** d. In autumn season
129. The common name of *Albizia procera* is
 a. Babool b. Jand c. Frash **d. Shareen**
130. Lateral Growth is controlled by
 a. Xylem b. Phloem c. Cortex **d. Cambium**
131. *Prosopis cineraria* is typically found in
 a. **Dry tropical thorn forest** b. Tropical Forest
 c. Riverian Forest d. Scrub Forest
132. The best suited tree for sport goods is.
 a. *Dalbergia sissoo* b. *Populus deltoids* c. *Bombax ceiba* **d. *Morus alba***
133. *Dalbergia sissoo* is the principle species of
 a. **Irrigated Forest** b. Riverian Forest c. Tropical Forest d. Scrub Forest
134. Silvopastoral system means:
 a. Agriculture +Silviculture **b. Silviculture +Pasture Farming**
 c. Agriculture +Silviculture +Pasture Farming d. None
135. _____ Industry is one of the major wood based industry of Pakistan.
 a. Paper industry **b. Sport industry** c. Chip board d. None
136. Removal of branches from the trees for various purposes by assuring tree health is known as
 a. Lopping b. Pruning **c. Pollarding** d. Topping

137. Punjab Forestry Research Institute (PFRI), Gatwala, Faisalabad has two schools of Forestry located in Ghora Gali (Murree) and:
- a. Faisalabad. **b. Bahawalpur** c. Multan d. D. G. Khan.
138. Pakistan Journal of Forestry is published by
- a. **Pakistan Forest Institute Peshawar** b. University of Arid Agriculture, Rawalpindi
c. Punjab Forestry Research Institute, Fsd. d. University of Agriculture Faisalabad
139. Which one is cheapest method?
- a. Kiln seasoning b. Air seasoning **c. Water seasoning** d. None
140. Planting by rod is known as
- a. Notch planting b. Mound planting c. Pit planting **d. Dibble planting**
141. Thinning is done to have
- a. More number of trees b. More Forage **c. Less competition** d. More wood
142. Hard Wood means
- a. Coniferous Trees b. Dead xylem
c. Dead Phloem **d. Wood of broad leaved trees**
143. *Albizia lebbek* belongs to the group of trees of
- a. Soft wood b. Sap wood **c. Hard wood** d. Heart wood
144. Wood requirement of Pakistan for forest and forest products is:
- a. 6.6 M m³ b. 52.6 M m³ c. 75.0 M m³ **d. 35 M m³**
145. The perennial woody plant without a distinct upright stem is known as:
- a. Tree **b. Shrub** c. Bush d. Herb
146. The limiting component of environment for plant growth in plain area is:
- a. Temperature **b. Humidity** c. Wind d. Topography
147. Coniferous wood is largely made up of
- a. Vessels, b. Ray cells c. Fibers **d. Trachieds**
148. Crown of a tree consists of:
- a. Leaves, flowers, fruits, twigs** b. Limbs, bole, tap root
c. Bole, limb, taproot, fibrous root d. Adventitious roots, collar, stem
149. Cambium is located between:
- a. Sap wood and heartwood b. Outer dead bark, and living bark
b. Sap wood and living bark d. None of the above
150. Edaphic Factors are related to:
- a. Topography and aspect **b. Soil** c. controlled burning d. Living things

151. Each environmental Factor has
a. 3 levels b. 5 levels c. 2 levels d. None of the above
152. Which one is salt tolerant.
a. *Eucalyptus camaldulensis* b. *Bombax ceiba*
c. *Pinus roxburghii* d. *Populus deltoides*
153. We have best furniture wood from
a. *D.Morus alba* **b. *Dalbergia sissoo*** c. *Populus deltoides* d. *Acacia nilotica*,
154. While selecting a tree species for Agroforestry, one should look its:
a. Its Marketing Potential b. Its suitability to site.
c. Compatibility to farm crops **d. All above**
155. Roots of trees largely absorb water from the soil by:
a. Root cap b. Root tip **c. Root hairs** d. root –cortex cells
156. The common name *Elionurus hirsutum* grass is
a. **Gorkha** b. Kaj c. Khawi d. Murgha
157. In Pakistan, area under range is:
a. 20% b. 80% **c. 62%** d. 40%
158. Environmental factor consists of only
a. Climatic factors b. Biotic factors c. Edaphic factors **d. All of these**
159. Range Management is the science and art of:
a. Grazing of animals b. Forage production
c. Soil & water conservation **d. All above**
160. Range can be defined as
a. Area unsuitable for cropping b. Area suitable for small timber production
c. Area suitable for forage production d. None of these
161. In which ecological region, the ranges are in their poorest state of health
a. Tropical b. Temperate **c. Sub-Tropical** d. Alpine
162. The range area in the arid and semi-arid region is
a. 5-20% b. 20-40% c. 40-60% **d. None of these**
163. Low productive range area in Pakistan is
a. 25% b. 40% **c. 85%** d. <20%
164. Annual rain fall of Cholistan range land is
a. 100 mm **b. 100-200 mm** c. 300-400 mm d. 500-750 mm
165. Major cause of soil erosion in Pothowar range land is
a. Water b. Wind c. Wind and water d. None of these

a. Livestock **b. Livestock and their products** c. Soil + water d. None of these

180. Minimum range area is found in province of

a. **Khyber-Pakhtoon-Khawa** b. Punjab c. Sindh d. Baluchistan

181. Maximum range area is found in province of

a. Khyber-Pakhtoon-Khawa b. Punjab c. Sindh **d. Baluchistan**

182. Major land use in Khyber-pakhtoon-Khawa is

a. **Forestry** b. Farming c. Livestock production d. Mining

183. Overgrazing means when grazing intensity is

a. 25% b. 40% c. 50% **d. 70%**

184. Vast area supporting natural vegetation which is suitable for grazing and browsing by livestock is known as

a. Vast waste land b. Pasture land **c. Range land** d. Barren land

185. Application of science and art on range lands for obtaining maximum yield on sustained basis is termed as

a. **Range management** b. Range improvement
c. Waste land management d. None of these

186. Range area of Pakistan is variable due to texture and structure of

a. Soil b. Rain fall and temperature c. Altitude **d. All these factors**

187. Soils of range lands in Pakistan are generally

a. Fine textured **b. Light textured** c. Medium textured d. None of these

188. Vegetation of arid range lands of Pakistan is dominated by

a. Shrubs **b. Grasses** c. Trees d. Herbs

189. Vegetation of moist subtropical rangelands is dominated by

a. Grasses and shrubs **b. Trees and shrubs** c. Trees and forbs d. None of these

190. Thal and Cholistan range area of Pakistan have

a. Dense vegetation b. Very dense vegetation
c. Sparse vegetation d. None of these

191. Percentage of range area of Punjab is:

a. 78% **b. 40%** c. 60% d. 55%

192. Range area of Baluchistan is

a. 8.20 m.ha b. 7.80 m.ha c. 6.10 m.ha **d. 27.40 m.ha**

193. Range site provides to plants

209. Range improvement operations increase:

- a. Run off b. Water erosion **c. Site potential** d. Forage production

210. Range improvement operations decrease

- a. Desertification **b. Increaser and invader** c. Site in accessibility d. All of these

211. The leaf of a legume plant has the following parts

- a. Blade b. Sheath c. Ligule **d. None of these**

212. Range ecosystem is comprised of following components

- a. Site b. Plants c. Animals **d. All of these**

213. Man is:

- a. Hervivorous **b. Omnivorous** c. Carnivorous d. None of these

214. Carrying capacity of 54 ha/A.U/year shows that site is

- a. Good b. Fair c. Excellent **d. Poor**

215. A cow needs how much quantity of air dry forage per day

- a. 13.5 kg b. 16 kg c. 8 kg **d. 9 kg**

216. Buffalo is equivalent to

- a. 1.3 Animal unit b. 0.6 Animal unit **c. 1.5 Animal unit** d. 1.7 Animal unit

217. Uniform grazing leads to

- a. Undergrazing b. Overgrazing **c. Proper utilization of forage** d. None of these

218. Uneven grazing is due to

- a. Distant location of water points b. Animal behaviour
c. In accessibility in the range **d. All of these**

219. Grazing according to carrying capacity means

- a. **Grazing in equilibrium with available forage** b. Grazing according to available livestock
c. Grazing according to the kind of animals with respect to the kind of forage available. d. None of these

220. Normally half of the biomass is grazed, but some times intensity of range use is different for each range and depends on

- a. Kind of plants** b. Growth stage of plants c. Temperature and rain fall **d. All of these**

221. No. of plants per unit area is known as

- a. Frequency **b. Density** c. Intensity d. Dormancy

222. Plants complete their lifecycle in a very short time are

- a. Mesophytes b. Helophytes **c. Ephemeral** d. Xerophytes

223. Air dried forage used to feed livestock is called

- a. Herbage b. Silage c. Fodder **d. Hay**

224. Plant species whose no. decreases in response to heavy grazing known as

- a. Increaser **b. Decreaser** c. Invader d. None of these
225. Plant species which occupy range land rapidly and dominant existing species are known as
- a. Increaser b. Decreaser **c. Invader** d. None of these
226. Which of the area is highly productive from livestock grazing point of view
- a. Scrub forest b. Temperate forest **c. Pastures** d. Desert range lands
227. Very low production range area in Punjab is
- a. Pothowar b. D.G. Khan **c. Cholistan** d. Thal
228. Which of the district is included in Pothowar range area
- a. Faisalabad b. Bhakkar c. Narowal **d. Rawalpindi**
229. Total area of sindh province is
- a. 25 m.ha. b.10 m.ha c.12 m.ha **d. 14.09 m.ha**
230. Total range area of all provinces is
- a. 80.75 m. ha b. 75. 1 m. ha c. 100 m. ha **d. 79 m. ha**
231. Percentage of range area of Baluchistan province is
- a. 90% **b. 79%** c. 68% d. 80 %
232. Range area in Sindh is
- a. **7.80 m. ha** b. 15.1 m. ha c. 10.9 m. ha d. 5.2 m. ha
233. Total area of Azad Jammu and Kashmir is
- a. 4.10 m. ha b. 5 m. ha c. 2.33 m. ha **d. 1.33 m. ha**
234. Range area in Azad Jammu and Kashmir is
- a. 1 m. ha b.1.5 m. ha **c. 0.6 m. ha** d. 2.07 m.ha
235. Deserts or semi-deserts' Cholistan range land is found in :
- a. Khyber Pakhtoon Khewa province **b. Punjab province**
c. Sindh province d. Baluchistan province
236. Chagi and Kharan range lands are found in
- a. Khyber Pakhtoon Khewa province b. Punjab province c. Sindh province
d. Baluchistan province
237. Khohistan range land is found in
- a. Khyber Pakhtoon Khewa b. Baluchistan **c. Sindh** d. Gilgit-Baltistan
238. Thar parker (Thar) range area is located in the province of
- a. **Sindh** b. Punjab c. Baluchistan d. Khyber Pakhtoon Khewa
239. lasbela-Makran coast range area is found in
- a. **Baluchistan** b. Punjab c. Sindh d. A.J.K
240. The deserts in Pakistan are the result of

a. Overgrazing b. High temperature c. Overcutting of woody vegetation **d. Aridity**

241. Range lands of Pakistan are presently producing the following percentage of their potential

a. 0-10 b. 20-40 **c. 10-50** d. 70-80

242. The current trend of range deterioration has

a. Stopped completely b. Stopped partially **c. Still in progress** d. None of these

243. Consequently the out-come of range deterioration has taken the following forms

a. Decrease in number of desirable forage species b. Deterioration of soil vegetation and wildlife
c. Speed up the process of desertification **d. All of these**

244. Overexploitation of range vegetation has led to

a. Reduction in the vigor of range plants b.Reduction in water holding capacity of soil
c.Reduction in wildlife **d. All of these**

245. Shortening of growing and grazing period in our ranges is the result of

a. **Seasonality** b. Overgrazing c. Vegetation cover d. None of these

246. Natural unit comprises of specific site, native vegetation and animals of all kinds as well as local people living together at one time having nearly well defined boundaries and being independent of their similar units is referred to as

a. Ecology **b. Ecosystem** c. Sociology d. Social system

247. Range animals consist of only

a. Game animals b. Livestock c. Rodents **d. All of these**

248. Following percentage of solar energy is utilized and converted by primary producers (range plants) into plant organic molecule or compounds

a. 6% **b. 1%** c. 3% d. 8%

249. Low production from range site means loss of energy from the site which is attributed due to

a. Little erratic and irregular rain b. Loss of soil due to wind and water erosion
c. Occurrence of floods and droughts **d. All of these**

250. Major factors in a range ecosystem responsible for the loss of solar energy (radiation) are

a. Lack of range vegetation cover
b. Reduced efficiency of range vegetation cover for capturing and utilizing the solar energy
c. Both of these d. None of these

251. Wildlife generally refers to all species of:

a. Mammals b. Birds c. Reptiles **d. All of the above**

252. Different kinds of wild animals have been named in the:

a. Bible b. Isaiah (7:24) c. Quran d. **All of the above**

253. The linkage of humans and animals and the importance of wildlife in the past _____ years has been brought to limelight largely because we have learnt that their existence is inextricably tied to our own:

- a. 50 b. **100** c. 150 d. 200

254. In addition to their role in the ecosystem, the value of wildlife is also found in their _____

- a. educational b. scientific c. aesthetic d. **all of the above**

255. Pakistan being located on the confluence of the western end of the Indian subcontinent and the Iranian plateau supports a varied and interesting mix of flora and fauna belonging to the:

- a. Indo-malayan b. Palearctic regions
c. some forms originating from the Ethiopian region d. **All of the above**

256. Pakistan can be divided into how many biogeography provinces including:

- a. Parmir b. Karakorum highlands c. Himalayan highlands d. **All of the above**

257. Rich in fauna and flora areas:

- a. Northern mountainous areas embracing Himalayan, Karakorum and Hindu Kush ranges
b. In Northern areas, Malakand, hazara and azad Kashmir are rich in fauna and flora
c. **both (a) & (b)** d. None of these

258. Himalayan foothills and the potwar region including _____ are covered with the scrub forests which have been reduced to scanty growth at most of the places:

- a. Salt range b. Kala chitta range c. **Both (a) & (b)** d. none of these

259. Medium size animals like _____ ural, barking deer, goral and chinkara and partridges - grey, black, seese and chakor are supported in these habitats:

- a. **Punjab** b. KPK c. Sindh d. Baluchistan

260. Chinkara is the only animal which can still be found in fair numbers in _____ and rarely in Thal:

- a. **Cholistan** b. Thar c. Both (a) & (b) d. None of these

261. Indian courser are the main bird species. peafowl occurs in some areas of _____

- a. **Cholistan** b. Thal c. Thar d. None of these

262. Irrigated forest plantations have emerged as a new land use practice for the last _____ years:

- a. 50 b. **100** c. 150 d. 200

263. Birds of prey like:

- a. Marine turtles b. Ridley, green c. **Peregrine** d. All of the above

264. Along the shore there are species of:

- a. Peregrine b. Cherrug c. **Leather back and hawk bill** d. Tawny eagle

265. The important waterfowl in Pakistan are:

- a. Marine turtles b. Ridley, green c. **Geese (greyiage, bar-headed)** d. All of the above

266. The species characteristics are an expression of the genetic make-up of an animal species influencing the extent and nature of _____

- a. home range, breeding season
- b. **longevity, territory, and the niche**
- c. both (a) & (b)
- d. none of these

267. Habitat destruction is the indirectly acting factor while _____ hunting are the main direct human factors affecting wildlife populations:

- a. legal
- b. illegal
- c. **both (a) & (b)**
- d. none of these

268. Understanding population dynamics involves rates of change from _____

- a. **one year to the next**
- b. two years to the next
- c. three years to the next
- d. none of these

269. Carrying capacity is a balance between _____

- a. vegetation and animals
- b. by an expression of animals density
- c. **both (a) & (b)**
- d. none of these

270. The concepts of population dynamics and carrying capacity led to management of wildlife which may be defined as:

- a. art
- b. science of manipulating the centrum of wild animal populations to meet specific objectives
- c. **both (a) & (b)**
- d. none of these

271. Species management includes:

- a. techniques of stocking, game ranching, refuges, hunting
- b. manipulating habitat factors
- c. **both (a) & (b)**
- d. none of these

272. The regulations towards the management of wildlife in the subcontinent date back to _____ when the policy guidelines were given for the conservation of natural resources:

- a. **1894**
- b. 1896
- c. 1898
- d. 1900

273. The forest act was promulgated in _____ which was later adopted by the government of Pakistan.

- a. 1925
- b. 1926
- c. **1927**
- d. 1928

274. The forest policies having ceased to be relevant were later revised in 1955, and then in _____

- a. 1960
- b. **1962**
- c. 1964
- d. 1966

275. Forest act _____ has new been revised by the authors of forestry sector master plan:

- a. 1925
- b. 1926
- c. **1927**
- d. 1938

276. Wildlife was managed under West Pakistan wildlife management ordinance _____

- a. 1955
- b. 1957
- c. **1959**
- d. 1961

277. Realizing the need for a better management policy for wildlife, a high-powered wildlife, a high-powered wildlife enquiry committee, constituted by the government of Pakistan presented their (draft) report in 1970, following which all the provinces and administrative unit promulgated their own wildlife act within administrative units promulgated their own wildlife act within a span of two years _____

- a. **1974 and 1975**
- b. 1975 and 1976
- c. 1976 and 1977
- d. none of these

278. Realizing the need for the conservation of national resources, the government of Pakistan with the assistance of the world conservation union (IUCN) framed a national conservation strategy _____

- a. **1992** b. 1993 c. 1994 d. 1995

279. The salient features of the strategy 1992 relating to wildlife, referred to here as biodiversity, are:

- a. The strategy to improve the situation b. action plan c. actions/interventions d. **all of the above**

280. Actions/interventions is:

- a. re-organization of protected area system
b. community participation in the conservation and management of biodiversity
c. development of human resources d. **all of the above**

281. Re-organization of protected area system is:

- a. the basic scientific data being available on key ecosystems, sites
b. species needing protection
c. both (a) & (b) d. **none of these**

282. Conservation program for the future may include:

- a. habitat evaluation and management b. rehabilitation of the habitats
c. minimizing the rate of deforestation and desertification d. **all of the above**

283. Endangered habitats or wildlife species could also be identified completely or partially outside the protected areas. Conservation programs should therefore be addressed to:

- a. involvement of local communities. work to be undertaken outside the protected area system, hence heavily based on community-led and managed activities, and awareness building
b. reduced hunting be the message to be conveyed to different offices
c. promotion of non-chemical control of agricultural pests d. **all of the above**

284. Windbreaks/shelterbelts cover:

- a. trees and / or shrubs can substantially improve the productivity of farmlands
b. they are exposed to strong winds c. **both (a) & (b)** d. none of these

285. The best windbreaks approach is 100% crown density in the low-profile shrub, rows, and _____ density in the tall rows:

- a. **50%** b. 60% c. 70% d. 80%

286. In Pakistan, because of small field size, most often 2 or 3 rows windbreaks are used, and should expect the effects to reach only about 12h downwind and _____ upwind:

- a. 1h b. **2h** c. 3h d. 4h

287. A windbreak with 50% crown density is more effective than one of either 100% or of _____ density:

- a. 15% b. 20% c. **25%** d. 30%

288. After proper design and establishment of the windbreak, the farmer needs to pay particular attention to a key management needs:

- a. Grazing protection b. Fire protection c. Pruning d. **all of the above**

289. Terracing is an effective method of soil conservation:

- a. desert areas b. **hilly areas** c. plains d. riverine areas

290. Which is the main causative factor for desertification?

- a. irrigated agriculture b. **overgrazing** c. tourism d. developmental activities

291. Deforestation may reduce the chances of:

- a. **rain fall** b. frequent cyclones c. erosion of surface soil d. frequent landslides

292. Deforestation causes:

- a. **soil erosion** b. pollution c. no floods d. none of these

293. One of the following crops is the most effective in controlling soil erosion:

- a. cotton b. **pigeon pea** c. green gram d. maize

294. Sheet erosion is caused by:

- a. fast running rivers b. wind c. **heavy rains** d. glaciers

295. Soil conservation can best achieve by having:

- a. wind screens b. **good plant covers** c. restricted human activity d. low rainfall

296. Main indicator of soil erosion is:

- a. **deforestation** b. afforestation c. ozone layer d. goats and grazing animals

297. Dark colored soils are considered most fertile as they contain:

- a. gravel and sand b. sand and calcium c. **clay and humus** d. silt and earthworms

298. Eroded soils are:

- a. rich in plant nutrients b. unaltered in plant nutrients c. **devoid of plant nutrients** d. all of these

299. Fifth of June is celebrated as:

- a. **World environment day** b. Darwin's birthday
c. World health and hygiene day d. World population day

300. Mulching helps in:

- a. **Moisture conservation** b. Weed control c. Improvement of soil structure d. Increasing soil fertility

301. What is the major cause of diminishing wildlife?

- a. cannibalism b. **habitat destruction** c. felling of trees d. paucity of drinking water

302. Soil erosion can be prevented by:

- a. deforestation b. heavy rains c. **afforestation** d. over grazing

303. Which of the following plants is used as windbreak?

- a. delonix b. Mangifera c. eucalyptus d. **prosopis**

304. Side effect of heavy and constant grazing is that the:

- a. upper layers of soil are loosened and are eroded
- b. lower layers are made more compact and root respiration is interfered with
- c. lower compact layers make root penetration difficult
- d. all of the above**

305. The possible beneficial effect of the grazing animals is:

- a. addition of their excreta to the soil**
- b. eradication of weeds
- c. removal of wild plants
- d. removal of wild animals

306. The cutting of trees from the forests of hill near a catchment area:

- a. will have no effect on causing floods in plain
- b. will benefit the mankind for more area for cultivation
- c. will have no effect on climatic condition of that area
- d. may cause flood in plains in rainy season**

307. Grasses possess great regenerative power because they are:

- a. dominant species
- b. rhizomatous
- c. constantly grazed**
- d. fast growing

308. Soil erosion in plains consequent to rain fall is initiated by:

- a. rill erosion
- b. sheet erosion**
- c. gully erosion
- d. all of these

309. If the topsoil has been eroded, we retire a land and grow over it:

- a. lichens
- b. blue-green algae
- c. legumes
- d. grasses**

310. If the same crop is repeatedly grown in a field:

- a. nitrogen starvation may result
- b. specific mineral deficiency may arise**
- c. soil will become prone to diseases
- d. water level in soil will recede

311. Bunds, dams and drains are constructed to prevent:

- a. stream bank erosion
- b. sheet erosion
- c. slip erosion
- d. gully erosion**

312. The amount of soil lost to sea each year due to rainfall is around:

- a. 3,000 million tons
- b. 3,000,000 million tons**
- c. 3,00,00,000 million tons
- d. 3,00,000 billion tons

313. The chief cause of accelerated erosion is:

- a. excessive rains
- b. windstorms
- c. overfelling and overgrazing**
- d. all of these

314. In dry farming initially the fertility of the land can be increased by:

- a. agrostology
- b. basin listing
- c. growing grazing fields
- d. animal husbandry**

315. If there is a little slope in the field, the soil erosion can be prevented by:

- a. contour terracing
- b. contour strip cropping**
- c. contour farming
- d. all of these

316. The fertility level of any soil is generally determined by:

- a. aeration and hydration
- b. humus and mineral contents
- c. humus, mineral and hydration level
- d. all of these**

317. The most common method used for cultivation on hills:

- a. levelling b. ridging c. **bench terracing** d. channeling

318. The removal of weeds by ploughing is called:

- a. mulching b. fallowing c. **tilling** d. contour farming

319. Terracing is done in:

- a. desert areas b. **hilly areas** c. dry areas d. plain areas

320. What are the helping factors of watershed management?

- a. evolve a long watershed policy for conserving the country's watershed
b. alternatives must be provided to the local community
c. appropriate funds must be allocated d. **all of the above**

321. What is the object of watershed management?

- a. an increase in agricultural production which maintains the quantity of affordable food available to majority of population
b. increasing or maintaining standard of living of growing population
c. increasing gross national product and employment opportunities in all areas of nation
d. **all of the above**

322. Material deposited by flowing water is called _____

- a. **alluvium** b. alluvial fans c. albedo d. none of these

323. The basic components of watershed cycle are:

- a. precipitation b. canopy interaction c. thorough fall d. **all of the above**

324. Types of fire are:

- a. ground fire b. stem fire c. crown fire d. **all of the above**

325. Managing watershed in forest area is / are :

- a. practices for soil protection and flood control b. practices for increasing water yield
c. **both (a) & (b)** d. none of these

326. Concentrate water saving efforts with:

- a. vegetation b. engineering structures c. check dams d. **all of the above**

327. Cropping methods in watershed areas are:

- a. land consideration: land is divided into small pieces of different owners
b. land classification: should be done according to (i) permeability (ii) percentage of cover (iii) type of vegetation cover
c. **both (a) & (b)** d. none of these

328. Stream flow or discharges means:

- a. it is quantity of water flowing in the stream or channel

- b. quantity, quality and timing of water yields are mostly affected by man
- c. **both (a) & (b)**
- d. none of these

329. The main causes of flood are:

- a. rainfall pattern
- b. denudation in watershed
- c. compaction of soil and decrease in inf rate
- d. **all of the above**

330. Range resources of Pakistan are:

- a. due to bioclimatic variations, the range vegetation varies from one area to other
- b. range condition of the areas also varies from site to site
- c. alpine pastures and northern mountain ranges are comparatively in fair to good condition
- d. **all of the above**

331. The region constitutes a series of high mountain ranges of:

- a. Karakorum
- b. HinduKush
- c. Pamir
- d. **all of the above**

332. The altitude varies from 1500 to 8600 m and includes 19 peaks over 7600 m, such as:

- a. K2
- b. nanga parbat
- c. Rakaposhi
- d. **all of the above**

333. Major land forms Cholistan desert ranges is / are :

- a. subrecent river plain
- b. the first sandy terrace above the hakra river (late Pleistocene)
- c. the second sandy terrace above the kakra river plain (late Pleistocene)
- d. **all of the above**

334. Natural revegetation is:

- a. **cheapest and slow process of rehabilitating depleted rangelands**
- b. costly and fast process of rehabilitating depleted rangelands
- c. both (a) & (b)
- d. none of these

335. Which area of Pakistan has a high potential for natural revegetation:

- a. **Pothwar**
- b. Cholistan
- c. river side
- d. none of these

336. Artificial reseeding is prescribed in which circumstances:

- a. **when natural vegetation cannot recover within a short period and there are few desirable species**
- b. in grassy plains
- c. in flooded areas
- d. none of these

337. Name the principles and procedure which are used for reseeding of desert rangeland in Pakistan:

- a. proper selection of range sites
- b. choice of ecologically suitable species
- c. elimination of plant competition
- d. **all of the above**

338. The desert rangelands of _____ are within the reach of monsoon rainfall:

- a. thal b. cholistan
- c. thar d. **all of the above**

339. _____ mountains of Pakistan are subject to heavy soil erosion:

- a. **northern** b. western Baluchistan ranges
- c. southern d. eastern

340. The terms _____ are used synonymously:

- a. **watershed and catchment** b. land body and dimension depth
- c. both (a) & (b) d. none of these

41. About 70% of the _____ hectares of land on earth are watershed land:

- a. **10 billion** b. 15 billion
- c. 20 billion d. 25 billion

342. At present _____ population is living in the watershed areas and are converting forest into agriculture land for food production:

- a. **50-80%** b. 55-85%
- c. 60-90% d. 65-95%

343. The importance of watershed management was realized when Pakistan signed Indus water treaty with India through which right of water of _____ was given to India while Pakistan has the right on river Indus and Jhelum:

- a. Chenab b. Ravi
- c. Sutlej d. **all of the above**

344. Mangla dam on river:

- a. **Jhelum** b. Chenab
- c. Indus d. ravi

345. Tarbela dam on river:

- a. Jhelum b. Chenab
- c. **Indus** d. Ravi

346. In Pakistan about _____ area is arid or semi arid and agriculture is not possible without irrigation:

- a. 40% b. 50%
- c. **60%** d. 70%

347. Tarbela dam is being silted at _____ acre feet per year while mangla is being silted at a rate of _____ acre feet per year due to misuse of their watershed area:

- a. **109000, 42,000** b. 110000, 43000

c. 115000, 44,000 d. none of these

348. Main source of energy in Pakistan is :

a. **hydro-electricity** b. atomic energy

c. coal energy d. none of these

349. Management constraints - the constraints of management need to be identified in the initial phase of planning:

a. physical b. biological

c. social d. **all of the above**

350. Watershed management planning phases is / are:

a. reconnaissance survey b. local or watershed level survey

c. watershed inventory d. **all of the above**

351. The determination of the dimensions, form, volume, age and increments of logs, single trees, stands or whole wood is termed as

a. Forest ecology b. **Forest mensuration** c. Forest taxonomy d. Silviculture

351. Head loads, donkey loads, camel loads and cart loads are frequently used in to sell the _____.

a. Tree fruits b. Tree products c. Bark d. **Firewood**

352. Terminal tree height and _____ at breast height are required to calculate the volume of cylindrical tree stem.

353. **Cross sectional area** b. Tree form c. Roots length d. Bark color

354. On sloping grounds, the diameter at breast height (DBH) of a tree is determined from

a. Eastern side b. **Uphill side** c. Downhill side d. Northern side

355. Christen's Hypsometer, used to measure tree height, is constructed on the _____ principles

a. Chemical b. Biological c. Trigonometric d. **Geometric**

356. Smalian and Huber's formula are appropriate to calculate the volume of a tree stem fraction when it resembles with frustum of a _____.

a. Cylinder b. Cone c. Neloid d. **Paraboloid**

357. Which one of the formula is used to roughly estimate the tree volume without bark?

a. Newton's formula b. Huber's formula
c. **Quarter girth formula** d. Pressler's formula

358. There are _____ board feet in one cubic foot.

a. 6 b. **12** c. 18 d. 24

359. Fuel stacks in Pakistan, locally called "Pharies" are usually made with _____ dimensions (length \times width \times height).

a. 30 ft \times 10 ft \times 10 ft b. **40 ft \times 5 ft \times 5 ft**

- b. $50 \text{ ft} \times 2 \text{ ft} \times 2 \text{ ft}$ d. $60 \text{ ft} \times 8 \text{ ft} \times 8 \text{ ft}$
360. Form factor is the ratio of tree true volume to the volume of a _____, with the same diameter and height as the tree.
- a. **Cylinder** b. Cone c. Neloid d. Paraboloid
361. According to FAO (2010), deforestation rate in Pakistan from 1990 to 2010 was
- a. 0.66 % b. **1.66 %** c. 2.66 % d. 3.66 %
362. Pakistani forests contain about_____ million tons of carbon
- a. **213** b. 313 c. 413 d. 513
363. According to World Bank (2015), forest cover in Qatar is about:
- a. **0 %** b. 15% c. 30% d. 45%
364. Carbon sequestration by trees and vegetation is the carbon sequestration through ____process
- a. Physical b. Chemical c. **Biological** d. Biochemical
365. The most abundant and naturally present gas in the atmosphere is:
- a. CO_2 b. Oxygen c. **Nitrogen** d. CH_4
366. Research is carried out to
- a. Investigate systematically b. Discover and interpret the facts
b. Advance the knowledge d. **All of them**
367. A document submitted in support of a candidature for an academic degree presenting the author's research and findings is called:
- a. Report b. **Thesis** c. Synopsis d. Project
369. In the project, a specific model for activity plans that illustrates how the activities are interconnected is termed as
- a. Activity chart b. **Ghantt chart** c. Flow chart d. U-chart
370. In research manuscript authors' list, first author is called?
- a. Section editor b. Last author c. **Principle author** d. Co-author
371. Higher Education Commission (HEC) of Pakistan has placed the non- impact factor journals in _____category.
- a. X b. Y c. Z d. **All of them**
372. Which country does not have any river?
- a. France b. Pakistan c. Brazil d. **Saudi Arabia**
373. Rainforests are not located in:
- a. **Pakistan** b. Brazil c. Columbia d. Indonesia
374. FPS (Foot, Pound, Second) system of measurements is also named as:
- a. Metric system b. CGS system c. **English System** d. Local system

375. If girth of a tree is 4 feet and 7 inches, that will be equal to about:
- a. 4.70 feet b. 4.25 feet c. **4.58 feet** d. 4.16 feet
376. Which one of the following instrument can't be used for tree diameter measurement?
- a. Angle guage b. Relaskope c. Vernier caliper d. **Abney's level**
377. The distant between ground level and the basal portion of the main stem when a tree is cut is termed as _____ height:
- a. **Stump** b. Bole c. Merchantable d. Total
378. A piece of roundwood having _____ diameter at thin end is called Timber in Pakistan.
- a. 2 inches b. 4 inches c. 6 inches d. **8 inches**
379. The most accurate and direct method of volume measurement that can be employed for irregular shaped wood is:
- a. Haga altimeter b. **Xylometer** c. Dendrometer d. Hypsometer
380. The specific gravity or relative density can be calculated by dividing the density of liquid or solid with the density of :
- a. Air b. **Water** c. Shisham wood d. Soil
381. The average annual increment at any age is termed as:
- a. CAI b. PMAI c. **MAI** d. GBH
382. A physiological process in plants in which biotic components are converted to abiotic components with the release of energy is called:
- a. Photosynthesis b. **Respiration** c. Transpiration d. Evaporation
383. Branch of ecology which deals with the interaction between individuals and populations of different species is _____ ecology:
- a. a. **Community** b. Population c. Landscape d. Evolutionary
384. Which one of the following light colour is not absorbed by plants?
- a. a. Red b. Blue c. **Green** d. Yellow
385. Shade intolerant plants are also called:
- a. Sciophytes b. **Helophytes** c. Hydrophytes d. Halophytes
386. Plants which grow in habitats, which are neither dry nor wet and temperature of the air is neither too high nor too low are called:
- a. Xerophytes b. **Mesophytes** c. Sciophytes d. Hydrophytes
387. Plants which live in the high temperature throughout the year are called:
- a. **Megatherm** b. Mesotherm c. Microtherm d. None of these
388. Soil drainage falls in
- a. Climatic Factor b. Physiographic Factor c. **Edaphic Factor** d. Pyric Factor

389. Change in the allelic frequencies within the gene pool of a population is called:
a. Adaptation b. **Evolution** c. Acclimation d. Modification
390. Extra-ordinary thick bark of chir-pine (*Pinus roxburghii*) stem which protects it from fires is a _____ adaptation:
a. **Morphological** b. Physiological c. Behavioural d. Huge
391. Small, hardy and thick leaves of Van (*Salvadora oleoides*) which cut down transpiration losses is a _____ adaptation:
a. **Morphological** b. Physiological c. Behavioural d. Huge
392. Tolerance of waterlogging by Dib (*Typha angustifolia*) and willow (*Salix tetrasperma*) etc. is a _____ adaptation:
a. Morphological b. **Physiological** c. Behavioural d. Huge
393. Folding of leaves of Siris (*Albizia lebbek*) at night to further cut down transpiratory losses is a _____ adaptation:
a. Morphological b. Physiological c. **Behavioural** d. Huge
394. Mimicry in animals and birds is a good example of _____ adaptation:
a. **Morphological** b. Physiological c. Behavioural d. Huge
395. An interdependent multidirectional relation between producers and consumers is called:
a. Food chain b. **Food web** c. Food box d. Ecosystem
396. The process of propagule growth and their adjustment in the new area is called:
a. Stablization b. Migration c. **Ecesis** d. Aggregation
397. Ecological feeding relationship between two or more organisms living closely together in such a way that one benefit and there is no effect on other, is termed as:
a. Mutualism b. Neutralism c. **Commensalism** d. Predation
398. Ecological feeding relationship between two or more organisms living closely together in such a way that one benefit and other dies, is termed as:
a. Mutualism b. Neutralism c. Commensalism d. **Predation**
399. The type of succession that occurs in areas that are devoid of any life, is termed as:
a. Zero succession b. New succession c. **Primary succession** d. None of these
400. Term "Taiga" is used for which type of forests?
a. Mangrove b. Rainforest c. Riverine d. **Boreal**
401. It is not a type of biome:
a. **Ocean** b. Forests c. Deserts d. Grasslands
402. How much speed of wind can cause uprooting of trees
a. 10Km/H b. 20Km/H c. 30Km/H d. **40Km/H**

403. Which tree has yellow flowers in May-June
a. **Cassia fistula** b. *Vachellia nilotica* c. *Bombax ceiba* d. None of these
404. Which one is best for taking cutting
a. **Lateral shoot** b. Succulent shoot c. Top portion of shoot d. None of these
405. The plant that grows in full sun light is called
a. **Haliophyte** b. Halophyte c. Psammophyte d. Hydrophyte
406. Which type of plant is known as "Sciophyte"
a. Light demander b. **Shade loving** c. Light sensitive d. None of these
407. Which one is best for taking cutting cutting
a. **Lateral shoot** b. Succulent shoot c. Top portion of shoot d. None of these
408. Vivipary occurs in
a. Plants b. Animals c. **Bothd.** d. None of these
409. Stumps are prepared from
a. **Seedlings** b. Shoots c. Leaves d. None of these
410. Best planting method for waterlogged soils is
a. Dibble planting b. **Mound planting** c. Berm planting d. All of these
411. Soil transported and deposited by water is called
a. **Alluvial soil** b. Loess soil c. Colluvial soil d. All of these
412. A temporary dam for re-routing original stream flow to allow the construction of permanent dam is called
a. Dam b. **Kaffir dam** c. Barrage d. All of these
413. The instrument used for measuring intensity of radiant energy is called
a. Psychrometer b. Pyrheliometer c. **Actinometer** d. Tensiometer
414. A wall constructed on uphill side along roads in hilly areas for soil conservation
a. **Breast wall** b. Retaining wall c. Barrage d. Diversion wall
415. Streams contributing to ground water are called
a. Effluent streams b. **Influent streams** c. Perennial streams d. All of these
416. Downward movement of water towards deeper soil horizon is called
a. Seepage b. **Percolation** c. Run off d. None of these
417. Majority of the world water is bound chemically in the minerals i.e.
a. 5.24% b. 98% c. 1.02% d. **94.75%**
418. One Cubic foot of water flowing through a point in one second is
a. Acre-feet b. Million acre-feet c. **Cusec** d. mL
419. *Avicinia* is an important specie of

- a. Temperate forests b. **Mangrove forests** c. Sub-tropical forests d. Alpine
420. *Pinus roxburghii* is an important specie of
- a. **Sub-tropical forests** b. Tropical forests c. iii) Temperate forests d. iv) Alpine forests
421. Loss of water molecule from different plant parts is called
- a. Transpiration b. Evaporation c. Interception d. **Evapo-transpiration**
422. Lateral movement of water on soil surface under the force of gravity is
- a. Percolation b. **Runoff** c. Seepage d. Infiltration
423. Movement of water in any direction under adhesive and cohesive forces is called
- a. Recharge b. Seepage c. Throughfall d. All of these
424. A small unstable seasonal streamlet which cannot be ploughed up easily is
- a. **Gully** b. Rill c. Contour d. Passel
425. Watersheds are important because
- a. Provide residence b. Freshwater source c. Livelihood provision d. **All of these**
426. Water that accumulates in the ground after passing through the surface is called
- a. Hygroscopic water b. **Ground water** c. Fresh water d. All of these
427. The points on the topographic map having similar precipitation are called
- a. Watersheds b. **Isohyetes** c. Command areas d. None of these
428. The instrument used to measure evaporation is called
- a. Anemometer b. **Lysimeter** c. Actinometer d. Albedo
429. Area where streams empty into bodies of water instead of into large vallies is called
- a. Sea b. **Delta** c. Dam d. Barrage
430. Moisture content of the soil after gravity drainage is called
- a. Live capacity b. **Field capacity** c. Dead capacity d. All of these
431. The study of earth's surface forms and the process that shape them is termed as
- a. **Geomorphology** b. Soil science c. Soil physics d. Topography
432. The plain formed at the base of some mountain range is called
- a. **Piedomont** b. Foothills c. Floodplain d. All of these
433. Precipitation in the form of ice balls produced in convective clouds is called
- a. Snow b. **Hail** c. Rime d. Glaze
434. The rainfall that is produced by mechanical lifting over mountain barriers is called
- a. Cyclonic b. Frontal c. Convective d. **Orographic**
435. Forest cases are compounded under section of Forest Act 1927
- a. **Section-68** b. Section-58 c. Section-78 d. Section-48
436. Any act punishable under law is called

- a. **Offence** b. Crime c. Criminal misappropriation d. None of these
437. On the basis of ownership forests are classified into
 a. **2 categories** b. 4 categories c. 6 categories d. 8 categories
438. A place where justice is administered is called
 a. **Court** b. Police station c. University d. None of these
439. The offences for which the police can arrest without warrant are called
 a. **Cognizable offences** b. Non-cognizable offences c. Offences d. None of these
440. Forest officers are deemed public servants under section 73 of Forest Act 1927
 a. Section-68 b. **Section-73** c. Section-68 d. None of these
441. Which one is considered as blanket of earth?
 a. Soil b. **Forest** c. Atmosphere d. Ozone Layer
442. Identify the province that represents the largest forest area in the country
 a. Sindh b. Punjab c. **KPK** d. Baluchistan
443. Eucalyptus was introduced in Pakistan from
 a. Brazil b. America c. Canada d. **Australia**
444. Bamboo is multiplied through
 a. Suckers b. **Rhizome** c. Tubers d. Cuttings
445. The unique functional position of each population is called as
 a. Habitat b. **Niche** c. Ecotype d. Biome
446. Most suitable tree species for silkworm rearing is
 a. **Morus alba** b. *Dalbergia sissoo* c. *Populous deltoides* d. *Celtis australis*
447. Working plan is a tool for
 a. Forest Policy b. **Forest Management** c. Forest Mensuration d. Forest Surveying
448. Which one is considered as a poor man's timber
 a. Shisham b. Kikar c. **Bamboo** d. Jaman
449. Pines are propagated through
 a. Stem cuttings b. Seeds c. Coppicing d. Both a and b
450. When CAI culminate with MAI is
 a. Minimum volume production b. Pruning time c. **Rotation period** d. Thinning time
451. Hedgerow cultivation is also known as ----- cropping
 a. Relay b. **Alley** c. Farm d. Agro
452. Growth of trees from old stubbles near ground surface is called as
 a. Grafting b. Planting c. **Coppice** d. Lateral growth
453. Major disease of forest nurseries is

- a. Wilt b. Leaf spot c. **Damping off** d. Blight
454. Pruning is related to
- a. **Standing tree** b. Felled tree c. Leaning tree d. Log
455. The art and science of cultivating forest crop is known as
- a. Forestry b. **Silviculture** c. Afforestation d. Ecology
456. Most important species of moist temperate forests is -----
- a. ***Cedrus deodara*** b. *Pinus roxburghii* c. *Acacia nilotica* d. *Dalbergia sissoo*
457. Excellent quality garments are prepared from the fibers of
- a. **Bamboo** b. Eucalyptus c. Acacia d. Ficus
458. Which of the following is a frost tender tree species
- a. **Neem** b. Shisham c. Jaman d. Pipal
459. Process by which trees and plants absorb carbon dioxide, release the oxygen, and store the carbon is called as
- a. Carbon capture b. **Carbon sequestration** c. Carbon storage d. Oxygen releasing
460. International Day of Forests is celebrated on
- a. **21st March** b. 5th June c. 18th August d. 12th March
461. Most suitable tree for paper making is
- a. **Eucalyptus** b. *Ficus bengalensis* c. *Dalbergia sissoo* d. Alstonia
462. Area where wood or other wood products are stored is known as
- a. **Depot** b. Store c. Wood house d. Timber house
463. Best planting method for saline soils is
- a. **Pit planting** b. Mound planting c. Bed planting d. Dibble planting
464. Roof of the forest crop is called as
- a. Crown b. **Canopy** c. Bole d. Foliage
465. Climate having rainy winter and dry summer is called as
- a. Tropical b. **Mediterranean** c. Temperate d. Subtropical
466. Forest act which is enforced in Pakistan was formulated in
- a. 2004 b. **1927** c. 1947 d. 1973
467. Any area of land proclaimed a forest under forest law is called as
- a. Reserved forest b. **Legal forest** c. Protected forest d. Urban forest
468. Tropical grasslands are called as
- a. Prairies b. **Savannas** c. Taiga d. Forest grassland
469. Any plant whose above ground part is not woody is called as
- a. Shrub b. Tree c. **Herb** d. Bamboo

470. A major biotic unit consisting of plant and animal communities having similarities in
 a. form and environmental conditions is called as
 a. Forest b. **Biome** c. Tropics d. Flora
471. Nitrogen fixing trees belong to.....family
 a. **Fabaceae** b. Poaceae c. Myrtaceae d. Malvaceae
472. The severest form of erosion in hilly areas is called as
 a. **Gully erosion** b. Sheet erosion c. Rill erosion d. Chemical erosion
473. The science that deals with the circulation, distribution, and properties of the waters of
 a. the earth is called as
 a. **Hydrology** b. Aquifer c. Watershed d. Water management
474. A permanent, geographically recognisable unit of forest land forming the basis of prescription and
 permanent record of all forest operations is called as
 a. **Compartment** b. Forest land c. Legal forest d. National Park
475. Point at which diameter or girth is measured on a standing tree
 a. **Breast height** b. Timber height c. Diameter height d. Tree height
476. Taungya system was started in
 a. **Burma** b. Pakistan c. India d. Germany
477. Bamboos with single culms are called as
 a. Hybrid b. Sympodial c. **Monopodial** d. Dwarf
478. All the biotic and abiotic factors collectively are known as
 a. Edaphic b. Climatic c. **Environmental** d. Physiographic
494. Wood of which tree is considered best for furniture?
 a. Poplar b. Ipil Ipil c. Bakain d. **Walnut**
479. Xerophytes are the plants of
 a. Marshy land b. **Desert land** c. Rain fed land d. None of these
480. Hydrophytes are considered the plants of
 a. **Waterlogged area** b. Desert area c. Low rainfall area d. None of these
481. Mangroves forest are found in
 a. Desert area b. Mountainous area c. Plain areas d. **Coastal areas**
482. **Removal of branches from the tree by assuring tree vigor**
 i. a. Pruning b. Lopping c. Topping d. **Pollarding**
483. Rain forests are usually found in the regions of
 i. a. Moist temperate climate b. Dry temperate climate
 ii. c. Dry subtropical climate d. **Tropical climate**

500. Tropical rain forest are located where
- a. Rainfall is high
 - b. Rainfall and temperature is high
 - b. Temperature is high
 - d. **Rainfall, temperature and humidity is high**
501. Amazon forest is located in
- a. Alpine zone b. Subtropical zone
 - b. Mediterranean climate zone
 - d. **Tropical zone**
502. Agro forestry is the practices of
- a. Only growing trees
 - b. **Growing trees along with crops on the same field**
 - a. Only growing crops
 - d. None of these
503. Dominant trees are the
- a. **Tallest and have completely free crown**
 - b. Smallest and have not completely free crown
 - c. Combination of above 1st and 2nd statement
 - d. None of these
504. Even aged forest are
- a. Forest with trees of different ages
 - b. **Forest with trees of uniform ages**
 - c. Combination of 1st and 2nd statement
 - d. None of these
505. Most productive forest of the world are
- a. Alpine forest
 - b. **Tropical rainforest**
 - c. Thorn forest
 - d. temperate forest
506. Fir, Spruce and Deodar species are found in
- a. **Coniferous forest**
 - b. Scrub forest
 - c. Subtropical pine forest
 - d. none of these.
507. Amazon forests are located in
- a. Alpine zone
 - b. Subtropical zone
 - c. Mediterranean climate zone
 - d. **Tropical zone**
508. Good quality paper is manufactured from
- a. Bamboo plants
 - b. Shisham tree
 - c. **Sugarcane bogas**
 - d. Kikar tree
509. For temperate coniferous forest the best silvicultural felling system is
- a. Clear felling system
 - b. Coppice system
 - c. **Shelter wood system**
 - d. Selection system
510. Coppice crop is obtained from
- a. seedling
 - b. Root suckers
 - c. Layering
 - d. **Old stubble**
511. Murree hills forest area is part of
- a. **Temperate forest**
 - b. Subtropical forest
 - c. Sub alpine forest
 - d. None of these
512. Resin is collected from
- a. Fir tree
 - b. Deodar tree
 - c. Kikar tree
 - d. **Chir tree**

513. Edaphic factors are related to
a. **Soil** b. Atmosphere c. Topography d. Humidity
514. Forest mensuration is part of
a. Silviculture b. **Forest management**
515. Which tree has allelopathic effect on farm crops
a. Shisham b. Kikar c. **Sufeda** d. Simal
516. Major function of Range Management is
a. Water conservation b. Soil Conservation c. **Water and Soil Conservation** d. None of these
517. Major products of range management is
a. **Livestock** b. Water c. Soil d. None of these
518. Minimum range area is found in which province
a. KPK b. **Punjab** c. Sindh d. Balochistan
519. The Major land use in KPK is
a. **Forestry** b. Cultivation c. Livestock production d. None of these
520. Maximum Range area is found in which Province
a. Punjab b. Sindh c. KPK d. **Balochistan**
521. The major land use of Punjab is
a. **Cultivation** b. Range management c. Forestry d. None of these
522. The major cause of soil erosion in Thal range area is
a. Water b. **Wind** c. Wind and Water d. None of these
523. Soil of range lands in Pakistan are generally
a. **Light textured** b. Fine textured c. Medium textured d. None of these
524. Range area of Pakistan are variable due to
a. Climate b. Soil c. Vegetation d. **All these factors**
525. Major part of range area in Pakistan lies in the following climatic zone
a. Humid b. Sub humid c. **Arid and semi arid** d. All of these
526. Climate of most of the range areas of Pakistan ecologically is
a. Dry temperate b. Tropical c. **Sub tropical** d. Wet temperate
527. Vegetation of arid range area of Pakistan is dominated by
a. **Grasses** b. Shrubs c. herbs d. trees
528. With respect to soil, climate and vegetation, the range area of Pakistan are
a. Uniform b. Variable c. **Highly variable** d. Very Similar
529. Over grazing means grazing
a. 25% b. 50% c. **> 50%** d. None of these

- a. **Carbohydrates** b. Nitrogen c. Calcium d. Phosphorus
544. Weeding is done at
a. Pole stage b. **Seedling stage** c. Mature stage d. Sapling stage
545. Which part of Arjun tree is used as heart tonic
a. Seeds b. Roots c. **Bark** d. Leaves
546. Deforestation is caused due to _____
a. Grazing b. Timber c. Cultivation d. **All of these**
547. Most fertile layer of soil is ____
a. **Top layer** b. Organic layer c. Middle soil layer d. All of these
548. Percent----- of the world water is bound chemically in the minerals i.e
a. 5.24% b. 98% c. 1.02% d. **94.75%**
549. *Rhizophora* is an important species of _____ forests
a. Temperate b. **Tropical** c. Sub-tropical d. Alpine
550. Escape of liquid water molecule from water bodies and wet surfaces is called
a. Transpiration b. **Evaporation** c. Interception d. Evapotranspiration
551. Lateral movement of water on soil surface under the force of gravity is called
a. Percolation b. **Runoff** c. Seepage d. Infiltration
552. A small unstable seasonal streamlet which can be ploughed up easily is
a. Gully b. **Rill** c. Contour d. Passel
553. Xylem wood in broad leaf trees is largely made up of
a. **Vessels** b. Ray cells c. Fibers d. Trachieds
554. The study of response of a tree to environmental stress is referred as
a. Tree Ecology b. Forest Auto-ecology c. Forest synecology d. **a and b**
555. Christian's Hypsometer, used to measure tree height, is made on the principles of -----
a. Chemical b. Biological c. Trigonometric d. **Geometric**
556. Production of toxic chemicals by leaves of *Azadirachta indica* is
a. **Physiological Adaptation** b. Evolution
b. Behavior adaptation d. Adaptation
557. The perennial woody plant with a distinct upright stem is known as:
a. Herb b. Shrub c. Bush d. **Tree**
558. The dry, temperate forest are found at an elevation of
a. 3350-3800 m b. 1373-3050 m c. 925- 1675 m d. **1525- 3350 m**
559. A unit of a forest, permanently defined for administration, description and record is known as
a. Circle b. Beat c. **Compartment** d. Working Plan

560. The process of folding of leaves of Siris at night to reduce transpiration is called
561. Morphology Adapt. b. Physiological Adapt c. **Behavior Adapt** d. Evolution
562. The instrument which measures the wind speed is called
- a. Hygrometer b. Lysimeter c. **Anemometer** d. None of these
563. The objectives of Planned grazing system are
- a. Seed Production b. Uniform Utilization c. Animal Production d. **All of them**
564. A tunnel, open channel at the top of an embankment constructed to allow safe release of surplus water from the reservoir is called
- a. Spillway** b. Spur c. Dyke d. Check dam
565. The surface drainage channel that is made by the downhill movement of water is called
- a. Watershed b. Stream c. **River** d. Gully
566. Subterranean injection of CO₂ in deep oil/gas reserves or Deep Ocean is the carbon sequestration through ____ process
- a. **Physical** b. Chemical c. Biological d. Biochemical
567. Cage like baskets constructed of non-corrosive wire and filled with rock are known as
- a. Dam b. Karez c. Barrage d. **Gabbions**
568. The most abundant and naturally present green house gas in the atmosphere is:
- a. CO₂** b. NO₂ c. **Water vapors** d. CH₄
569. Among research manuscript authors, who communicates with journal's editor?
- a. Primary author** b. Last author c. **Corresponding author** d. Co-author
570. A wall constructed to change the direction of water flow
- a. Breast wall b. Retaining wall c. Barrage d. **Diversion wall**
571. The most important human activity, leading to the extinction of wildlife, is
- a. Pollution of wildlife b. Hunting for valuable wildlife products
- c. Introduction of alien species d. **Alternation and destruction of natural habitats.**
572. When is the World Wildlife week?
- a. First week of September b. Last week of September
- c. First week of October** d. Last week of October
573. Higher Education Commission (HEC) of Pakistan has placed the impact factor journals in ____ category.
- a. **W** b. X c. Y d. Z
574. Which of the following is a frost tender tree species?
- a. **Kikar** b. Shisham c. Bargad d. Red River Gum
575. Planting of new forests on lands that historically have not contained forests is called as.

- a. Deforestation b. Reforestation c. Forest land d. **Afforestation**
576. Silvo-pastoral agro-forestry system is the combination of
 a. Trees and crops b. **Trees and animals** c. Only trees d. Trees, crops and animals
577. Wood used for fuel should have
 a. Low calorific value b. **High calorific value** c. Timber value d. Moderate calorific value
578. Bamboos with dense clumps are called as
 a. **Sympodial** b. Monopodial c. Dwarf d. Large
579. Which tree species has the ability to fix atmospheric nitrogen?
 a. ***Dalbergia sissoo*** b. *Eucalyptus camaldulensis* c. *Mangifera indica* d. *Populous deltoides*
580. A document that regulates wood production, silviculture and tending activities in a forest for a specific period of time is called as
 a. **Working plan** b. Management plan c. Forest act d. Forest policy
581. Age of tree when its harvest will generate the maximum revenue or economic yield
 a. **Rotation** b. Increment c. Growth d. Development
582. The amount of new wood put on by a tree or a stand in a year is called as
 a. Wood volume b. Per year increase c. **Increment** d. Timber increase
583. Which is not a greenhouse gas
 a. Carbon Dioxide b. Methane c. Water Vapor d. **Oxygen**
584. The instrument used for measuring air temperature is called
 a. **Psychrometer** b. Pyrheliometer c. Actinometer d. Tensiometer
585. What is the animal symbol of World Wildlife Fund?
 a. Red Panda b. **Giant Panda** c. Tiger d. Kangaroo
586. The man, predators, scavengers cum decomposers are known as
 a. Primary Producer b. Secondary Producer c. Secondary Consumer d. **Final Consumer**
587. The driving force responsible for functioning and growth of the ecosystem is
 a. Chemical Energy b. Potential Energy c. Kinetic Energy d. **Solar Energy**
588. _____ % people of Pakistan suffer from protein deficiency
 a. 62 b. 60.5 c. **66** d. 65
589. Ecosystem has two components:
 a. Plants and animals b. Weeds and trees
 c. **Biotic and abiotic** d. Frogs and men
590. An ecosystem may be defined as:
 a. A localized association of several plants and animals

b. Different communities of plants, animals and microbes, together with their physico-chemical environments

c. Different communities of plants and microbes plus their physico-chemical environments

d. None of the above

591. In natural ecosystem, decomposers include:

a. Only bacteria and fungi b. Only microscopic animals

c. The above two types of organisms plus macroscopic animals

d. Only the above two types of organisms

592. Competition for water, minerals, light and space is most severe between two:

a. Closely related species occupying the same niche b. Closely related species occupying different niche

c. Unrelated species occupying the same niche d. All above

593. Ecosystem is:

A. Both open and closed unit depending upon the biomass present B. Closed unit

C. Open unit D. Both open and closed unit depending upon community type

594. A habitat of long severe winters and growing season limited to a few months of summer constitutes:

A. Savana ecosystem **B. Taiga ecosystem**

C. Tundra ecosystem D. None of the above

595. An ecosystem is:

A. A community of organisms interacting with one another B. The abiotic component of an area

C. The part of the earth and its atmosphere where living organisms exist **D. A community of organisms together with the environment in which they live**

596. Pond is an example of:

A. Artificial ecosystem B. Forest ecosystem

C. Natural ecosystem D. Grassland ecosystem

597. The term biosphere is used for the zone of earth where life exists:

A. On the lithosphere surface B. In the hydrosphere

C. In the lithosphere, hydrosphere and atmosphere **D. In the lithosphere and hydrosphere**

598. In an aquatic environment, microscopic animals and plants are collectively known:

A. Commensals B. Herbivores

C. Fauna and flora **D. Planktons**

599. Ecosystem may be defined as:

- A. Group of plants, which act as the energy suppliers B. Group of organisms which form population
- C. Functional unit for ecological studies** D. None of these
600. Prairies and steppes are parts of the natural regions called:
- A. Temperate grasslands** B. Tropical grasslands
- C. Prairie grasslands D. Steppes grasslands
601. The incorporation of minerals by microbes is called: c
- A. Mineralization B. Humification
- C. Nutrient immobilization** D. Microbe immobilization
602. The significance of ecosystem lies in:
- A. Flow of energy B. Cycling of matters
- C. Both (a) & (b)** D. None of the above
603. A food chain consists of:
- A. Producers and primary consumers B. Producer, herbivores and carnivores
- C. Producers, carnivores and decomposers **D. Producers, consumers and decomposers**
604. A food chain starts with:
- A. Nitrogen fixing organisms **B. Photosynthesizing organisms**
- C. Respiration D. Decomposers
605. If CO₂ is withdrawn from the biosphere, which organism would first experience negative effect?
- A. Primary consumers **B. Producers**
- C. Secondary consumers D. Tertiary consumers
606. Man is a:
- A. Producer **B. Consumer**
- C. Herbivore D. None of these
607. The two major functional components of an ecosystem are:
- A. Energy flow and food chain B. Mineral recycling and energy flow
- C. Food chain and decomposers** D. Energy flow and decomposers
608. The driving force of the ecosystem is:
- A. Carbohydrates in plants B. Biomass
- C. Solar energy** D. Producers
609. Which is a primary consumer?
- A. Scavenger B. Saprophyte
- C. Carnivore **D. Herbivore**
610. The transfer of energy from organism to organism is a natural community establishes:

- A. **Food chains** B. Biological control
C. Natural barriers D. All the above
611. Which of the following is non-renewable source of energy:
A. Mineral B. Water
C. **Forest** D. Solar energy
612. The primary productivity is minimum in the following ecosystem:
A. Tropical rainforest B. Temperate grassland
C. Tropical deciduous forest **D. Desert shrub**
613. What is contributed from the outer space in an ecosystem?
A. All the atmospheric gases B. Only carbon, hydrogen and oxygen
C. **Energy only** D. All the above components
614. The number of producers and consumers in an ecosystem is mutually controlled by a:
A. Productivity control B. Food chain mechanism
C. **Feed back mechanism** D. Any of these
615. The bacteria which attack the dead animals are:
A. First link of the food chain and are known as primary producers
B. Second link of the food chain and are herbivorous
C. Third link of the food chain and are tertiary consumers
D. The end of the food chain and are decomposers
616. If all the green plants were to disappear from the earth:
A. Only the herbivores will die **B. All the animal will die**
C. Only the carnivores will die
D. It will not matter to anyone because chemosynthetic bacteria will produce food for all
617. In a food chain the largest population is that of:
A. Producers B. Decomposers
C. Tertiary consumers D. Primary consumers
618. The processes involving the transformation of carbon compounds on earth include:
A. Only the plants **B. Both biological and non-biological processes**
C. Only the living organisms D. Only the animals
619. The study of interaction between living organisms and environment in a specific area is the study of:
A. Phytobiology B. Phytogeography
C. Ecosystem D. Phytosociology
620. A complex of several species and communities in various stages of succession maintained under similar climatic conditions is known as:

- A. Coniferous trees limited to *Abies* (Fir) B. *Pinus wallichiana* (blue pine) stand singly
C. In groups over an irregular, sometimes dense, lower storey of broadleaved trees
D. All of the above

634. Sub-alpine forests found in:

- A. Kashmir B. Swat C. Chitral **D. All of the above**

635. Himalayan moist temperate forests depict:

- A. The chief character of this type is the extensive development of coniferous forests
B. They also extend into the dry temperature regions
C. To a small extent into the sub-alpine forests **D. All of the above**

636. The chief coniferous species are:

- A. *Pinus wallichiana* B. *Cedrus deodara* C. *Picea smithiana* **D. All of the above**

637. Forest crops are known as:

- A. Nurse B. Main C. Subsidiary **D. All of the above**

638. The major kinds of rotation are:

- A. Physical B. Silvicultural
C. Rotation of the greatest volume production **D. All of the above**

639. Logging means:

- A. It is an operation comprising felling of trees, limbing, bucking and transportation of the resulting product out of forest to the point of its end use**
B. It is process of watering the forest C. Both (a) & (b) D. None of these

640. What are the major components of the timber harvesting system?

- A. Logging planning B. Setting up of the crop to be felled
C. Felling of trees and Transportation **D. All of the above**

641. Logging is effected by:

- A. Terrain B. Lean of trees C. Wind fallen trees **D. All of the above**

642. What is meant by seed orchard?

- A. For a long time it was held that the quality of future plants depends primarily upon the quality of the seed
B. Starting from this statement more and more attention was paid to the production of seeds of good quality
C. Both (a) & (b) D. None of these

643. What are methods of planting?

- A. Planting with naked roots B. Notch planting
C. Planting with ball of earth and/or Planting with containers **D. All of the above**

644. What is the method of sowing?

- A. Broadcasting B. Dibbling C. Strip or line sowing **D. All of the above**

645. Trees suitable for seed collection is/are:

- A. Plus trees: Trees of good genetic and phenotic constitution B. Seed stands:
Small patches of trees in the forest which are better in characters
- C. It is best to collect seed from trees in such groups **D. All of the above**

646. Seed collection agencies means:

- A. Forest guard B. Labourers
- C. Research institute (trained persons and proper selection of trees **D. All of the above**

647. Collection from standing trees is:

- A. The falling seeds should be collected on a cloth sheet spread under the tree
- B. The person should climb the tree and shake branches or pick the needs himself.
- C. Seed should be collected only from healthy trees **D. All of the above**

648. Seed certificate means:

- A. Seed is transported from one place to another a certificate should be sent along with
- B. In this certificate the species date of collection, locality from where collected, characteristics of mother trees. Method of collection and storage
- C. **Both (a) & (b)** D. None of these

649. Seed orchard means:

- A. It is plantation or group of good quality trees, which are purposely raised for the production of good quality seed
- B. The spacing is kept very wide in order to enable to tree to freely spread its crown so that flowering and fruiting is healthy and early.
- C. **Both (a) & (b)** D. None of these

650. The important features of evaluation of site for plantation purposes are:

- A. Geomorphology B. Soil features C. Hydrologic features **D. All of the above**

651. Tree Morphology' means:

- A. A branch of biology, which deals with external appearance or structure of plants
- B. Every tree has parts: Crown, stem, and roots **C. Both (a) & (b)** D. None of these

652. Methods of breaking of 'Dormancy' are:

- A. Water treatment B. Mechanical C. Fire treatment **D. All of the above**

653. Forest protection means:

- A. It is necessary that care should be taken to protect the forest from all forms of damage
- B. If the efforts of the forester are not to be wasted

665. Cryopreservation of tissue is done at the following temperature:
A. -196 B. 126 C. 206 D. None of these
666. Which of the following is not a reason of unnatural extinction of species?
 A. Environmental pollution B. Soil erosion C. Afforestation D. Increased urbanization
667. On the basis of genetic diversity, the following are differentiated within a species:
 A. Ecads **B. Ecotypes** C. Populations D. Communities
668. The blue revolution refers to enhancement in the production of:
A. Fishes B. Crabs C. Birds D. Mammals
669. Bio-diversity means:
 A. Some set of entities; biological diversity thus refers to variety within the living world
 B. A contraction of biological diversity. C. The range of variation or differences among
D. All of the above
670. The types of bio-diversity are:
 A. Genetic diversity B. Species diversity C. Ecosystem diversity **D. All of the above**
671. Maintenance of Biological Diversity is:
 A. In-situ conservation B. Ex-situ conservation
 C. Why conserve biological diversity **D. All of the above**
672. Biological diversity resources are:
 A. Food B. Pharmaceuticals **C. Both (a) & (b)** D. None of these
673. The effect of pollution is first and most marked on:
 A. **Natural flora of a place** B. Natural balance of our environment
 C. Natural geo-chemical cycles D. All the above three
674. Biological treatment of water pollution is done with the help of:
 A. Lichens B. Fungi C. **Phytoplanktons** D. None of the above
675. Foul smell in the water tanks, ponds etc, is due to:
 A. Anaerobiosis B. **Aerobiosis** C. Biological magnification D. Psammophytes
676. Air pollution is not caused by:
 A. Thermal power plant B. Diesel engine
 C. **Hydroelectric power station** D. Pollen grain
677. If water pollution continues at its present rate, it will eventually:
 A. **Make oxygen molecules unavailable to aquatic life**
 B. Make nitrates unavailable to aquatic life
 C. Prevent precipitation
 D. Stop the water cycle

678. The part of earth in which life exists is known as:
 A. Lithosphere B. **Biosphere**
 C. Atmosphere D. Hydrosphere
679. Mercury pollution causes a disease:
 A. Methaelo binemia B. **Minimata**
 C. Foolish disease D. Hepatitis
680. Heating of earth surface is due to:
 A. **Air pollution** B. Water pollution
 C. Soil pollution D. All of these
681. The component of a living cell affected by the pollutant SO₂ is:
 A. Nucleus B. **All cell membrane system**
 C. Cell wall D. Plasmodesmata
682. Some reliable indicators of air pollutants (SO₂ and noxious gases) are:
 A. Ferns and Cycas B. Green algae and aquatic liverworts
 C. **Lichens and mosses** D. Neem' tree and Eichhornia
683. Water pollution is caused by:
 A. Decay of bodies of aquatic organisms B. Rain
 C. Growth of phytoplankton D. **Industrial effluents**
684. This acts as bioindicator of air pollution:
 A. Alga B. **Lichen** C. Pinus D. Mustard
685. The atmospheric pollution is caused by:
 A. O₃ B. CO C. **CO₂** D. N₂
686. Air pollution is maximum caused by:
 A. Sewage and industrial effluents B. Household detergents and pesticides
 C. **Automobile exhausts and chemicals from industry** D. Sewage and pesticides
687. Sewage water can be purified for recycling with the action of:
 A. Aquatic plants B. Penicillin
 C. **Micro-organisms** D. Fishes
688. Photochemical smog is related to the pollution of:
 A. Soil B. Water
 C. Noise D. **Air**
689. The number of species in a single community is described as:
 Species diversity **b. Alpha diversity**
 Beta diversity d. Genetic diversity

690. The Kyoto protocol was signed in
 a 1992 b 1996 c 2005 d **1997**
691. World environment day is celebrated on
 a 5th July b **5th June** c 15th June d 5th February
692. The gas that may cause acid rain in industrial area is
 a **SO₂** b NH₃ c N d CO₂
693. Sphere of water is called as
 a Stratosphere b. **Hydrosphere** c Lithosphere d Ionosphere
694. Atmospheric humidity is measured by
 a Hygrometer b Hypsometer c **Hydrometer** d Radiometer
695. Which of the following is a frost tender tree species
 a **Kikar** b Red River Gum c Jaman d Mango
696. Tapering in tree is due to
 a Low temperature b High temperature c **High wind pressure** d Low wind pressure
697. Due to low atmospheric pressure the rate of transpiration will
 a **Increase** a Decrease c Remain constant d Decrease rapidly
698. Planting of new forests on lands that historically have not contained forests is called as
 a Reforestation b Forest inventory c Forest land d **Afforestation**
699. Process by which trees and plants absorb carbon dioxide, release the oxygen, and store the carbon is called as
 a Carbon capture b Carbon storage c **Carbon sequestration** d Oxygen releasing
700. A prolonged period of excessive heat, often combined with excessive humidity is called as
 a Heat stress b **Heat waves** c Heat Ratio d Heat /humidity ratio
701. Perennially frozen ground where the temperature remains below 0°C for several years is called as
 a **Permafrost** b Forest frost c Permanent snow d Snow line
702. Small particles in the atmosphere that can absorb or reflect sunlight depending on their composition.
 a Ferosols b **Aerosols** c Vapors d Liquor droplets
703. The gaseous envelope surrounding the Earth is called as
 a Hydrosphere b **Atmosphere** c Gasosphere d Metrosphere
704. Pseudo-stem occurs in
 a **Banana**
 b Shisham
 c Bamboos

- d Sugarcane
705. Pakistan became the member of world tourism organization in
 a 1947 b 1973 c **1949** d 2004
706. In Pakistan the separate ministry of tourism was created in
 a **2004** b 1996 c 1955 d 1947
707. PTDC stands for
 a **Pakistan tourism development centre**
 b Pakistan telecommunication development centre
 c Pakistan tourism development corporation
 d Pakistan tourism display centre
708. Training of animals for the elimination of tendencies to flee from man is called as
 a Domestication b **Taming** c Culling d Conservation
709. Existence of plants and animals in a common habitat is called as
 a **Forest community** b Wildlife c Fauna d Biotic community
710. Hypsometer is used for measuring of
 a Tree age b Tree Diameter c **Tree height** d Relative humidity
711. Xylometer is used for measuring the
 a Area of tree b Height of tree c Girth of tree d **Volume of piece of wood**
712. The amount of new wood put on by a tree or a stand in a year is called as
 a Per year increase b **Increment** c Timber increase d Wood volume
713. A tape used to measure the diameter of a tree
 a **Girth tape**
 b Measuring tape
 c Inch tape
 d Volume tape
714. Strip system is a kind of
 a Coppice system
 b Clear felling system
 c **Shelter wood system**
 d Patch cut system
715. Best suitable silvicultural system for light demander species is
 a Coppice with standard system
 b Selection system
 c Shelter wood coppice system

- d **Clear felling system**
716. A document that regulates wood production, silviculture and tending activities in a forest for a specific period of time is called as
- a **Working plan** b Management plan c Forest act d Forest policy
717. A permanent, geographically recognisable unit of forest land forming the basis of prescription and permanent record of all forest operations is called as
- a Depot
- b **Compartment**
- c Tropical forest
- d Irrigated forest plantation
718. The age of tree when the its harvest will generate the maximum revenue or economic yield
- a **Rotation** b Increment c Growth d Development
719. Dieback of -----is a very serious problem in the Indian subcontinent
- a **Shisham**
- b Arjun
- c Neem
- d Bargad
720. Damping off disease is mainly caused by
- a Fusarium solani
- b Ganoderma lucidum
- c **Rhizoctonia solani**
- d Fusarium oxysporum
721. Long-horned beetle is major problem of -----tree
- a Shisham b **Poplar** c Kikar d Pipal
722. -----is a major disease of forest nurseries
- a Wilt b Leaf spot c **Damping off** d Blight
723. Problem of sap release from small cracks in the infected bark, giving the tree a bleeding shape is called
- a Dieback c Decline c Wilt d **Gummosis**
724. First forest policy of Pakistan was announced in
- a 1947 b 1949 c 1954 d **1955**
725. Forest act which is enforce in Pakistan was formulated in
- a **1927** b 1947 c 2004 d 1973
726. A piece of land owned by the state but managed and used by all the villagers for the collective purposes of the community is called as

- a **Shamlat** b Village forest c Village pasture d Wasteland
727. Any area of land proclaimed a forest under forest law is called as
- a Endangered forest b Protected forest c **Legal forest** d Urban forest
728. Forest laws are
- a **Special laws** b Constitutional laws c National laws d General laws
729. The art and science of cultivating forest crop is known as
- a Forest production b **Silviculture** c Pruning d Pollarding
730. Removal of upper branches of a trees for promoting a dense head of foliage and branches
- a **Pollarding** b Cleaning c Pricking d Hardening
731. Cleaning practice is done at
- a Pole stage b Seedling stage c Mature stage d **Sapling stage**
732. Weeding in forest crops is required at
- a Mature stage
- b Pole stage
- c **Seedling stage**
- d Sapling stage
733. Removal of tree branches for improving the timber quality is called as
- a Thinning
- b **Pruning**
- c Pollarding
- d Sapling
734. Roof of the forest is called as
- a **Canopy**
- b Crown
- c Bole
- d Foliage
735. Growth of trees from old stubbles near ground surface is called as
- a Lateral growth
- b Grafting
- c **Coppice**
- d Planting
736. Trench berm nurseries are also called as
- a **Bed nurseries**
- b Polythene bag nurseries

- c Raised bed
d Dry nurseries
737. Best planting method for shoot cutting is
a Mound planting
b Trench Planting
c Notch planting
d Dibble planting
738. Forest having long and severe winter with less or mild summer is called as
a Tropical forests b Sub-tropical forests
c Urban forest d **Temperate forests**
739. Most suitable tree for match stick, packing and shuttering is
a Deodar b Neem c **Poplar** d Shisham
740. Nitrogen fixing bacteria fix atmospheric nitrogen for trees and in exchange receive
a **Carbohydrates** b Nitrogen c Calcium d Phosphorous
741. Harvesting, conservation and conversion of standing trees is called as
a Forest Protection b Forest Management c **Forest Utilization** d Forest Economics
742. Area where wood or other wood products are stores is known as
a Store house b **Depot** c Cold storage d Wood house
743. Cheap and normal quality paper used for printing newspaper is
a Light paper b News print c **Rag paper** d Bible paper
744. Which part of arjun tree is used as heart tonic
a Seeds b Roots c **Bark** d Leaves
745. A sheet made from fibers of wood is known as
a Thin board b **Fibre board** c Tissue board d Fire board
746. Export quality furniture is prepared in
a Sargodha b **Chiniot** c Lahore d Peshawar
747. Excellent quality garments are prepared from the fibers of
a **Bamboo** b Eucalyptus c Acacia d Ficus
748. Best suitable tree species for furniture making in Pakistan is
a *Bombax ceiba* b *Eucalyptus camaldulensis*
c *Ficus bengalensis* d *Dalbergia sissoo*
749. Animals which feed on twigs and branches of trees are called as
a Wild
b **Browsing**

- c Grazing
 - d Domestic
750. Animals which mostly feed on grasses and herbage are called as
- a **Grazing**
 - b Browsing
 - c Tamed
 - d Wild
751. Palatable grasses mean
- a **Fodder grasses**
 - b High yield grasses
 - c Low yield grasses
 - d Tall grasses
752. Tropical grasslands are called as
- a Prairies
 - b **Savannas**
 - c Taiga
 - d Forest grassland
753. Moving grazing animals to various parts of a range in succeeding years or seasons to provide for seed production, plant vigor, and for seedling growth.
- a Continuous grazing
 - b Range grazing
 - c **Deferred Grazing**
 - d Forest grazing
754. Any plant whose above ground part is not woody is called as
- a Tree
 - b Shrub
 - c **Herb**
 - d Bamboo
755. The systematic acquisition and analysis of resource information needed for planning and for management of rangeland is called as
- a Range utilization
 - b Range management
 - c Range Improvement
 - d **Range Inventory**
756. A major biotic unit consisting of plant and animal communities having similarities in form and environmental conditions is called as
- a **Biome**
 - b Biotic community
 - c Flora and Fauna
 - d Tropical area

757. Grasses belong to-----family
- a Fabaceae b Malvaceae c **Poaceae** d Myrtaceae
758. The process of segregating organisms from a group according to desired or undesired characteristics
- a Pulling b **culling** c Shifting d killing
759. Which erosion is common in relatively slopy areas with heavy rainfall
- a Gully erosion b **Sheet erosion** c Wind erosion d Rill erosion
760. Soils which are transported by water are called as
- a **Alluvial**
- b Moist soils
- c Colluvial
- d Eroded soils
761. Flow of water that occurs when excess stormwater, meltwater, or other sources flows over the Earth's surface is called as
- a **Runoff**
- b Seepage
- c Percolation
- d Infiltration
762. An engineering structure used to divert water from a river into a canal or from a large canal into a smaller canal is called as
- a Dam
- b Barrage
- c **Headwork**
- d Spill way
763. Largest earth filled dam of the world is
- a Mangla dam
- b **Terbela dam**
- c Three Gorges Dam
- d Warsak dam
764. Watersheds that drain in to the ocean / river are known
- a Closed drainage basins
- b Terminal drainage basins
- c Vertical basins
- d **Open drainage basins**

765. A place where two streams meet are called as
a Watershed b River c **Confluence** d Channel
766. The science that deals with the circulation, distribution, and properties of the waters of the earth is called as
a **Hydrology**
b Watershed
c Hydrological cycle
d Aquifer
767. The area that drains into a sanitary or combined sewer system is called as
a Sewershed
b Wayershed
c Headwork
d **Dam**
768. Strip system is a kind of
a Coppice system
b Clear felling system
c **Shelter wood system**
d Patch cut system
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 - b **Increment**
 - c Timber increase
 - d Wood volume
775. A tape used to measure the diameter of a tree
- a **Girth tape**
 - b Measuring tape
 - c Inch tape
 - d Volume tape
776. 92. Taungya system was started in
- a India
 - b **Burma**
 - c Pakistan
 - d Nepal
777. Agroforestry is a type of
- a Tropical forestry
 - b Urban forestry
 - c **Social forestry**
 - d Temperate forestry
778. Alley cropping is also called as
- a **Hedgerow intercropping**
 - b Farm cropping
 - c Relay cropping
 - d Patch cropping
779. Wood used for fuel wood should have
- a Low calorific value
 - b **High calorific and specific value**
 - c Moderate calorific value
 - d Good timber value
780. Which tree species has the ability to fix nitrogen
- a ***Dalbergia sissoo***
 - b *Mangifera india*
 - c *Eucalyptus camaldulensis*
 - d *Populous deltiodes*
781. Best suitable tree for sandy regions is
- a *Bombax ceiba*
 - b ***Tamarix aphylla***
 - c *Ficus religiosa*
 - d *Dalbergia sissoo*

782. Silvopastoral agroforestry system is the combination of
- a Crops and animals
 - b Only trees
 - c **Trees and animals**
 - d Trees, crops and animals
783. Best suitable tree species for sericulture is
- a ***Morus alba***
 - b *Acacia nilotica*
 - c *Terminalia arjuna*
 - d *Azadirachta indica*
784. The gas that may cause acid rain in industrial area is
- a **SO₂**
 - b NH₃
 - c N₂
 - d CO₂
785. Principle species of Subtropical pine forests is-----
- a *Cedrus deodara*
 - b *Pinus wallichiana*
 - c *Abies pindrow*
 - d ***Pinus roxburghii***
786. Forest having very hot and humid summer with less or no winter is called as-----
- a **Tropical**
 - b Subtropical
 - c Temperate
 - d Arctic
787. Most of the irrigated forest plantations are located in the ----- Province.
- a KPK
 - b Sindh
 - c **Punjab**
 - d Baluchistan
788. Most important climatic factor affecting tree growth is-----.
- a **Precipitation**
 - b Nutrients
 - c Altitude

- d Fire
789. Physiographic factors affecting forest growth include-----,-----, -----.
- a Precipitation, Latitude, Aspect
 - b **Slope, Latitude, Altitude**
 - c Altitude, Humidity, Insects
 - d Light, Temperature, Fire
790. Soil nutrients, texture and structure are related to -----factors.
- a **Edaphic**
 - b Climatic
 - c Biotic
 - d Pyric
791. Offshoots arising from the base of the tree trunks are called as-----.
- a Mother plant
 - b **Suckers**
 - c Coppice
 - d Grafted plants
792. Stumps of shisham and simal are raised in-----nurseries for transplanting in the field.
- a Potted
 - b **Trench-berm**
 - c Polythene bag
 - d Dry
793. Most suitable species for the site having pH < 8.5 and with EC >4 is -----.
- a *Bombax ceiba*
 - b ***Eucalyptus camaldulensis***
 - c *Morus alba*
 - d *Acacia nilotica*
794. -----planting is the most commonly used tree planting method for waterlogged soils.
- a Berm
 - b Trench
 - c **Mound**
 - d Dibble
795. To raise forest nursery seeds should be collected from-----
- a **Plus tree**

- b Over aged tree
 - c Forked tree
 - d Whip tree
796. Best fast growing species recommended for agroforestry is-----
- a ***Bombax ceiba***
 - b *Pinus roxburghii*
 - c *Ficus bengalensis*
 - d *Jacaranda mimosifolia*
797. -----is the prize timber producing tree species of KPK.
- a ***Cedrus deodara***
 - b *Pinus roxburghii*
 - c *Picea smithiana*
 - d *Jacaranda mimosifolia*
798. In gymnosperms cones are collected off the trees when-----
- a Open
 - b Immature
 - c **Still closed**
 - d Fallen
799. Tree seeds can be stored for several years in -----.
- a Open area
 - b Polythene bags
 - c **Jute bags**
 - d Glass jars
800. -----is the fibrous material that forms the main plant parts including, stem, limbs, branches, twigs etc..
- a Timber
 - b **Wood**
 - c Tissues
 - d Chlorophyll
801. -----is the best tree species used in plywood industry.
- a *Acacia nilotica*
 - b *Zizyphus mauritiana*
 - c ***Bombax ceiba***
 - d *Eucalyptus camaldulensis*

802. The area which drains surplus water into stream or river is called as-----.
- a Command area
 - b Basin
 - c Irrigated area
 - d **Watershed**
803. Volume of the water at the bottom of reservoir that can not be drained or used is called
- a **Dead capacity**
 - b Live capacity
 - c Delta of water
 - d Gravitational water
804. The biggest earth-filled dam of Pakistan is-----.
- a Mangla
 - b Diamer Basha
 - c **Terbela**
 - d Khanpur
805. The principle watershed management organization existing in Pakistan is -----
- a WAPDA
 - b WALDA
 - c MKDA
 - d **Provincial forest departments**
806. A concrete structure across a river with the arrangements for raising the level and regulating the flow of water is called-----.
- a Dam
 - b **Barrage**
 - c Headwork
 - d Spill way
807. A vast area supported by natural vegetation which is only suitable for grazing and browsing by the livestock is called as-----.
- a Forest area
 - b **Range**
 - c Command area
 - d Watershed area

808. Maximum number of animal units that can graze on an area of one hectare for the period of one year is called -----of that area.
- a **Carrying capacity**
 - b Range trend
 - c Range analysis
 - d Grazing system
809. A cow weighing about 450 kg and eating 9kg air dried forage is termed as -----
- a Range unit
 - b **Animal unit**
 - c BTU
 - d Grazing unit
810. The major pests of irrigated forest plantations include -----,-----,-----etc.
- a Vulture, Rabbits, Wild boar
 - b **Wild boar, Porcupine, Rats**
 - c Hog deer, Porcupine, Vulture
 - d Sheep, Goat, Cow
811. *Melanophila picta* is the common example of-----
- a **Poplar bark borer**
 - b Poplar sap wood borer
 - c Poplar stem borer
 - d Shisham bark borer
812. The possible causal organism responsible for the dieback of shisham in sub-continent is-----
- a Bacteria
 - b Nematodes
 - c Virus
 - d **Fungi**
813. Damping off disease in nurseries is caused by-----
- a **Phytophthora**
 - b Botryodiplodia
 - c Colletotrichum
 - d Ganoderma lucidum
814. Which one is primary consumer?
- a Scavenger

b Saprophytes

c Carnivores

d Herbivores

815. Which one is an endangered tree species?

a. Shisham

b. Kikar

c. Jand

d. Beri

816. Tip of ecological pyramid is occupied by?

a. Herbivores

b. Carnivores

c. Producers

d. None of These

817. Ecosystem creates?

a. Food Chain

b. Food Web

c. Both A&B

d. None of These

818. All living organisms on the earth interacting with atmosphere constitute

a. Biosphere

b. Community

c. Biome

d. Association

819. The primary consumers are described as

a. Herbivores

b. Converters

c. Transducers

d. All of These

820. Which is the most stable ecosystem

a. Desert

b. Ocean

c. Mountain

d. Forest

821. The part of earth in which life exists is called as

- a. Lithosphere
 - b. Biosphere**
 - c. Atmosphere
 - d. Hydrosphere
822. The flora and fauna in lakes and ponds represents
- a. Lentic Biota**
 - b. Lotic Biota
 - c. Abiotic
 - d. None of These
823. The source of energy in an ecosystem is
- a. Sun**
 - b. ATP
 - c. Sugar Made By Plant
 - d. Green Plants
824. A food chain has following trophic levels
- a. 3 or 4**
 - b. 3
 - c. 2
 - d. 1
825. The typical successions in forest are
- a. Riverine
 - b. Estuarine
 - c. Coniferous
 - d. All of These**
826. The major types of water erosion are
- a. gully
 - b. Sheet
 - c. Rill
 - d. All of These**
827. Temperate forests are found in
- a. Kashhmir
 - b. Dir
 - c. Swat
 - d. All of These**

828. Sources of organic matter are
- a. Primary
 - b. Secondary
 - c. Both**
 - d. None of These
829. The major effects of soil organic matter are
- a. Soil Depth**
 - b. Climatic Situation
 - c. Both A & B
 - d. None of These
830. The tharparkar desert is situated in
- a. Tharparkar
 - b. Sanghar
 - c. Mirpur Khas
 - d. All of These**
831. Tharparkar desert range covers million ha.
- a. 2.65**
 - b. 2.70
 - c. 2.75
 - d. 2.80
832. Kohistan ranges are situated in
- a. Karachi
 - b. Thatta
 - c. Laseba
 - d. All of These**
833. Kohistan ranges covers about Million ha
- a. 2.3**
 - b. 2.4
 - c. 2.5
 - d. 2.6
834. Suleman mountain ranges covers
- a. 1.5 million ha**
 - b. 2 million ha
 - c. 2.5 million ha

- d. none of these
835. Reseeding is not likely to be successful on areas receiving rainfall less than
- a. **300 mm**
 - b. 400 mm
 - c. 500 mm
 - d. 600 mm
836. In the thal area, planting tuft consists of
- a. *Cenchrus ciliaris*
 - b. *Lasiurus indicus*
 - c. **Both A & B**
 - d. None of These
837. The range lands of Pakistan are located in
- a. Arid Areas
 - b. Semiarid Areas
 - c. **Both A & B**
 - d. none of These
838. Longitudinal sand dunes moves slowly at the rate of per annum
- a. 5 m
 - b. **10 m**
 - c. 20 m
 - d. 30 m
839. Cholistan desert is located near
- a. Multan
 - b. **Bahawalpur**
 - c. Sahiwal
 - d. Rawalpindi
840. -----is a nitrogen fixing tree species
- a. **Vachellia nilotica**
 - b. *Ficus infectoria*
 - c. *Ficus bengalensis*
 - d. All of these
841. Mangla dam is built on river
- a. **Jhelum**
 - b. Chenab

- c. Indus
 - d. Ravi
842. Tarbela dam is constructed on river
- a. Jhelum
 - b. Chenab
 - c. Indus**
 - d. Ravi
843. Main source of energy in Pakistan is
- a. hydro- electricity**
 - b. Atomic energy
 - c. Coal energy
 - d. None of these
844. PhD Forestry was first introduced in
- a. Pakistan Forest institute
 - b. Forest Schools
 - c. University of Agriculture Faisalabad**
 - d. None of these
845. Range reseeding is
- a. Natural reseeding
 - b. Artificial reseeding
 - c. Both A & B**
 - d. None of these
846. Stock water development is
- a. Tobas
 - b. Karez
 - c. Small dams
 - d. all of these
847. Grazing system in northern mountains are
- a. Nomadic grazing
 - b. semi nomadic grazing
 - s. Local grazing
 - d. All of these**
848. About Percent of the country is arid to semiarid
- a. 50

- b.60
 - c. 70**
 - d. None of these
849. Crown consists of
- a. **Leaves**
 - b. Timber
 - c. Roots
 - d. All of above
850. Central darker colour portion of stem is called as
- a. Phloem
 - b. Living xylem
 - c. Heart wood**
 - d. None of these
851. Second stage of tree development is
- A. Seedling
 - B. Sapling**
 - C. Pole
 - D. Tree stages
852. Stratification occurs in
- a. Desert
 - b. Tropical forest**
 - c. Deciduous forest
 - d. Tundra
853. Most common method of breaking seed dormancy is
- a. Weathering
 - b. Mechanical
 - c. Fire Treatment
 - d. Water Treatment**
854. Bonsai is well known over centuries from....
- a. Japan & Malaysia
 - b. Japan & China**
 - c. China & Malaysia
 - d. None of These
855. The first Christmas tree was decorated at Windsor Castle by Prince Albert in

- a. 1840
 - b. 1842**
 - c. 1843
 - d. 1844
856. Dasht-i-Lut and Desht-i- Kafir deserts are found in
- a. Afghanistan
 - b. Turkey
 - c. Iran**
 - d. None of these
857. The high cold Gobi desert is found in
- a. China and Magnolia**
 - b. China and Pakistan
 - c. China and India
 - d. None of these
858. Rajasthan desert is located in
- a. Pakistan and India**
 - b. Pakistan and China
 - c. Pakistan and Afghanistan
 - d. None of These
859. The desert areas in Indo-Pak Subcontinent covers about
- a. 1.8 million square km
 - b. 1.7 billion square km**
 - c. 1.9 million square km
 - d. None of these
860. Which of the following is smallest unit
- a. Biosphere
 - b. Ecosphere
 - c. Ecosystem**
 - d. Biome
861. The nature of soil carried by river is
- a. Sandy
 - b. Clayey
 - c. Laterite
 - d. Alluvial**

862. Plant damages occur due to
- Biotic factors
 - Abiotic factors
 - A & B**
 - None of these
863. Changa Manga forest area is located in which district of Punjab?
- Kasur**
 - Lahore
 - Okara
 - Sahiwal
864. Tending operations are
- Weeding, cleaning
 - Thinning, pruning
 - Both A & B**
 - None of these
865. Cultural operations are
- Drainage
 - Irrigation
 - Burning**
 - None of these
866. Thinning methods are
- Mechanical
 - Selective
 - Schedule / statistical
 - All of above**
867. Cultural practice are
- Cultivations
 - Weeding
 - Sowing
 - All of the above**
868. Wood of chir pine and eucalpts is useful for
- Pulp
 - Paper
 - Both A & B**

- d. None of these
869. The important roles played by the forests are
- a. Productive
 - b. Protective
 - c. Both A & B**
 - d. None of these
870. The role does not require much familiarization
- a. Productive**
 - b. Protective
 - c. Both A & B
 - d. None of these
871. Which of the following means synecology?
- a. Study of single species
 - b. Study of different species**
 - c. Both A & B
 - d. None of these
872. Edaphic factor is due to
- a. Man
 - b. Temperature
 - c. Soil**
 - d. Herbivores
873. The plants growing on saline soils are called
- a. Pheritophytes
 - b. Xerophytes
 - c. Halophytes**
 - d. Hydrophytes
874. Succulents are likely to be found in
- a. Tropical rain forest
 - b. Deciduous forest
 - c. Deserts**
 - d. Tundras
875. Area where two communities overlap each other
- a. Niche
 - b. Ecotype

c. Edge line

d. Ecotone

876. Biotic components consist of

a. Producer only

b. Consumers only

c. Decomposers only

d. All of the above

877. Soils transported by water are called

a. Alluvial

b. Colluvial

c. Residual

d. Eolian

878. Plants growing on externally cold soil are called

a. Halophyte

b. Oxylophyte

c. Psychrophyte

d. Psammophyte

879. The forests at an altitude of 10,000 ft are called as

a. Tropical

b. Sub-tropical

c. Temperate

d. Alpine

880. The most interfering biotic components are

a. Birds

b. Herbivores

c. Hunters

d. Human beings

881. Xerophytes are generally found in

a. Deserts

b. Water

c. Hills

d. Water bank