

FEDERAL PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS
IN PBS-17, UNDER THE FEDERAL GOVERNMENT, 2002

FORESTRY

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE: Attempt **FIVE** questions in all, including **QUESTION NO. 8** which is **COMPULSORY**. All questions carry **EQUAL** marks. Avoid writing irrelevant material for the sake of bulk. Organize your write-up.

1. Suggest suitable strategic measures separately for (a) improving productivity, (b) enhancing economic viability cum profitability and (c) ensuring a secure future for man-made irrigated forests plantations of Pakistan.
2. (a) How can you prolong effective life of Mangla Lake? Discuss if raising of dam height is an appropriate lasting solution of the problem.
(b) Why raising of Range Livestock has not taken roots as an industry (as opposed to Poultry Industry) in Pothowar Tract which is considered a high potential range area?
3. Give a brief of the major recommendations of Forest Sector Master Plan of 1993. Will it lead Pakistan to a timber cum fuel surplus status by the year 2018? If not why?
4. (a) Briefly describe general characteristic features of various ecological factors influencing forest tree growth.
(b) What silvicultural measures do you propose for rejuvenating and extending Dry Temperate Forests of Balochistan?
5. How will you attract capital and intellect from private sector for conserving natural habitats for the promotion of wildlife in various regions of the country? In case you succeed in your efforts, in what specific ways will you like this newly generated capital and intellect to serve the cause of wildlife promotion in the country.
6. How will you estimate age, height, diameter at breast height and true volume of a forest tree bole? What is meant by CAI and how will you estimate it for a single tree?
7. Write brief notes on any **FIVE** of the following:

(a) Succession	(b) Completely Randomised Design
(c) Quality Class	(d) Kas training
(e) Savannah	(f) Causeway
(g) Fire line	(h) Niche.

COMPULSORY QUESTION

8. Give only appropriate response in the answer book. Do not reproduce the question.

FORESTRY

(A) Fill in the blanks with suitable word(s).

- (1) Smallest permanent land unit in forest management is called
- (2) A permanent and stable community of plants and animals of all kinds in which woody vegetation dominates is called
- (3) Forests growing along seacoast and subject to daily sea water inundations are called
- (4) Science and art of establishing, tending and perpetuating a healthy tree crop is called
- (5) Number of animal units that can be grazed in one hectare of range area for one complete year is called of that range area.
- (6) Deterioration and degradation of vegetation and soil of an area due to any outside agency such as over-grazing or fire etc. is called
- (7) A basin like area which is less deep than wide and collects surplus rain water that ultimately drains into a stream is called
- (8) Dislodging, removal and loss of soil particles from their original site by run off water is called
- (9) A line on the highest ground that separates two adjoining basins is called
- (10) Area of a habitat under effective control of a particular animal or a group of animals which is actively defended by them against any intrusion by other animals of the same species is called

(B) Write only TRUE or FALSE against each sub-question number.

- (11) Basal area of a forest is the sum total of cross sectional areas of all tree boles of that forest if these are cut at ground level.
- (12) Normal forest is one which comprises of healthy and vigorous trees of same age.
- (13) Arranging fire wood logs or sawn wood members in layers one above the other in the form of a standardized pile for easy measurement, seasoning and storage is called stacking.
- (14) Volume Table give heights, diameters at breast height and volumes etc for various age groups of trees.
- (15) An animal unit refers to a cow weighing about 450 Kg and eating about 9 Kg of air dry forage per day.
- (16) Unmanaged grazing by the livestock of unsettled migratory tribes is called Best Block Grazing System.
- (17) A cusec refers to one cubic foot of water following in one minute.
- (18) In sloping lands a 100% slope is equal to 45° slope.
- (19) Omnivores are the same as scavengers.
- (20) In wildlife biology, a litter refers to a layer of dead leaves, straw, twigs etc. lying on ground surface.
