

# FEDERAL PUBLIC SERVICE COMMISSION



## COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT, 2011

Roll Number

### FORESTRY

<b>TIME ALLOWED:</b>	<b>(PART-I MCQs) 30 MINUTES</b>	<b>MAXIMUM MARKS: 20</b>
<b>THREE HOURS</b>	<b>(PART-II) 2 HOURS &amp; 30 MINUTES</b>	<b>MAXIMUM MARKS: 80</b>
<b>NOTE: (i) First attempt PART-I (MCQs) on separate Answer Sheet which shall be taken back after 30 minutes.</b>		
<b>(ii) Overwriting/cutting of the options/answers will not be given credit.</b>		

### (PART-I MCQs) (COMPULSORY)

- Q.1.** Select the best option/answer and fill in the **appropriate box** on the **Answer Sheet**. (1 x 20=20)
- (i) Raising trees on farm areas is called:  
(a) Forestry (b) Social forestry (c) Agro-forestry (d) Urban forestry (e) None of these
- (ii) According to one estimate that even if 20,000 hectares of land is brought under trees annually the percentage of forest area will not increase by more than:  
(a) 0.025 % (b) 0.05 % (c) 0.075 % (d) 0.1 % (e) None of these
- (iii) Tree planting along farm roads and boundaries is considered as:  
(a) Avenue planting (b) Linear planting (c) Inter planting (d) Compact planting (e) None of these
- (iv) Plants those grow on stream banks are known as:  
(a) Hydrophyte (b) Halophyte (c) Mesophyte (d) Pheritophyte (e) None of these
- (v) Keeping health and care of tree in view, removal of branches to improve the quality of timber is referred to as:  
(a) Pollarding (b) Lopping (c) Pruning (d) Cutting (e) None of these
- (vi) Periodical removal of selected trees during various growth stages for the promotion of growth of remaining standing trees is known as:  
(a) Clearing (b) Cleaning (c) Weeding (d) Thinning (e) None of these
- (vii) Trees those provide shelter/protection to desired tendered plants during their early growth stages after which they are removed are considered as:  
(a) Dominant trees (b) Co-dominant trees  
(c) Sub-dominant trees (d) Nurse trees (e) None of these
- (viii) Root/shoot cuttings are also known as:  
(a) Stem cuttings (b) Roots cuttings (c) Stumps (d) Layerings (e) None of these
- (ix) In shelterwood system all the trees are removed:  
(a) In one installment (b) More than one installments  
(c) Trees are not removed at all (d) None of these
- (x) A forest having all trees of same species is called as:  
(a) Mixed forest (b) Pure forest (c) Uniform forest (d) Even aged forest (e) None of these
- (xi) Range forage and other feeds having dietary essentials in sufficient quantities and proper proportions for growth, maintenance and reproduction of range livestock are considered as:  
(a) Complementary ration (b) Supplemental ration  
(c) Balanced ration (d) None of these.
- (xii) The grazing practice whereby the forage on a part or on all of the range area is allowed to be grazed after it had attained seed maturity stage is called:  
(a) Conservative grazing (b) Deferred grazing  
(c) Proper grazing (d) Optimum grazing (e) None of these

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- (xiii) Range plants which decrease in number in response to heavy grazing are known as:  
(a) Indicator species (b) Decreasers (c) Increases (d) Invaders (e) None of these
- (xiv) The act of grazing animals of removing roots whether woody or herbaceous is known as:  
(a) Nibbling (b) Browsing (c) Grubbing (d) Grazing (e) None of these
- (xv) Extensive grasslands comprising tall grasses and scattered dwarf thorny trees located in sub-humid, sub-tropical regions of East Africa and India are known as:  
(a) Pampas (b) Prairies (c) Savannah (d) Tundra (e) None of these
- (xvi) Living cum functional place of wild animals is called:  
(a) Niche (b) Roosting place (c) Parching place (d) habitat (e) None of these
- (xvii) Natality means:  
(a) Birth rate (b) Death rate (c) Population rate (d) Growth rate (e) None of these
- (xviii) A place where the natural flora and fauna is preserved, promoted, managed and is opened to visitors is called as:  
(a) Game reserve (b) Wild life sanctuary  
(c) National park (d) Recreational park (e) None of these
- (xix) Out of total water potential of 140 MAF of Western rivers, the amount of water that flows into sea without being utilized is:  
(a) 25 MAF (b) 36 MAF (c) 48 MAF (d) 50 MAF (e) None of these
- (xx) A small obstruction constructed in a gully or other water course to decrease the velocity of flow of water is known as:  
(a) Dam (b) Check dam (c) Dyke (d) Spillway (e) None of these

### PART-II

**NOTE:**(i) **PART-II** is to be attempted on separate Answer Book.  
(ii) **Attempt ONLY FOUR questions from PART-II. All questions carry EQUAL marks.**  
(iii) **Extra attempt of any question or any part of the attempted question will not be considered.**

- Q.2.** Analyse the present and future situation of forestry in Pakistan and discuss the reservations/reasons due to which farmer community is reluctant to adopt agro-forestry in Punjab. Support your answer with appropriate figures and sound arguments. (20)
- Q.3.** With respect to climate, vegetation, soil, wildlife, topography and other physiographic features, discuss briefly but comprehensively different types of forest found in Pakistan and also mention their contribution in wood production. (20)
- Q.4.** Enlist qualities of good wood. Also discuss in detail different wood defects and their respective treatments. (20)
- Q.5.** How are various range components related to each other. Briefly point out various losses of energy from range ecosystem and also write a note on corrective measures with reference to energy losses from a range ecosystem. (20)
- Q.6.** Define "Carrying capacity of a grazing land." How it is determined practically? Write the procedure stepwise. How many sheep can be allowed to graze on 500 hectares of grazing land per month if weight of green forage per quadrat was 2 Kg and it contained 70 percent moisture contents? Size of the quadrat used for sampling was  $1 \times 1 \text{ m}^2$  and grazing allowed was 50 percent respectively. (20)
- Q.7.** Write the factors responsible for drastic decline of wildlife in Pakistan along with brief discussion of principles of sound wildlife management. Also give and justify your suggestions that how wildlife can be promoted in the country? (20)
- Q.8.** Write short notes on any **FOUR** of the following: (5 x 4 = 20)
- (a) Forestry and eco-tourism (b) Social forestry (c) Agro-grazing  
(d) Environment degradation and vegetation  
(e) Conservation of natural resources (Forests, rangelands and watershed areas) as a key of national food security.  
(f) Green house effects (g) Forest Eco-system (h) Forage forestry/forest grazing.

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