

FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS
IN BPS-17, UNDER THE FEDERAL GOVERNMENT, 2005

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. Neat and clean writing with correct spellings of technical names will enhance chances of better marking.

1. What are major environmental problems of Pakistan? How could knowledge of forestry help in combating these problems?
2. Proper management and use of resources in a given Range are based on four important fundamental criteria. Describe the same in detail with respect to Range areas in Cholistan desert.
3. What are different Temperature Zones of Pakistan? Relate different Forest types of Pakistan to these Temperature Zones. Give correct Binomial Nomenclature of major species representing each Forest Type in this respect.
4. Define Range Condition. Analyze Range Condition by drawing a relationship between Grazing Intensity and Percent Plant Composition by using your own hypothetical data.
5. Describe Selection Coppice System. Which Forest Type of Pakistan is being worked under this system and why?
6. (A) Define Forest Nursery. What is the need of raising a Forest Nursery?
 (B) Calculate Number of seeds required to be sown per square foot in a bed nursery to obtain 200 seedlings by using the following data:
 No. of seeds per pound = 19000
 No. of Transplant per pound = 9000
7. Write short notes on the following:

(a) Merrill Four Pasture Rotation System	(b) Plotless sampling
(c) Tree Fallow	(d) Nurse Crop
	(e) Cover crop

COMPULSORY QUESTION

8. Write only the correct answer in the Answer Book. Do not reproduce the question.
 - (1) Natural habitat of Blackbuck is:

(a) Khirthar Range Area	(b) Makran Coastal Belt
(c) Cholistan Desert	(d) None of these
 - (2) Dhaman (*Cenchrus ciliaris*) under grazing pressure is:

(a) decreaser species	(b) increaser species
(c) invader species	(d) None of these
 - (3) Medicago species is classified as:

(a) grass species	(b) forb species
(c) tree species	(d) None of these
 - (4) Dumpy Level furnishes:

(a) horizontal line of sight	(b) vertical line of sight
(c) curvilinear line of sight	(d) None of these
 - (5) Resumed Lands are the lands surrendered by big landlords under the Land Reform Act of:

(a) 1955	(b) 1960
(c) 1965	(d) None of these

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- (6) Private owners can offer their lands to the Forest Department for afforestation under the Pakistan Forest Act, 1927 vide its Section No.:
- (a) 19 (b) 38
(c) 57 (d) None of these
- (7) Guzara Forests were set aside to meet bonafide domestic needs of local communities at the time of first settlement of land ownership in:
- (a) 1872 (b) 1890
(c) 1936 (d) None of these
- (8) Cock chafer grubs are the major pests which attack plants at:
- (a) seedling stage (b) sapling stage
(c) tree stage (d) None of these
- (9) Forest Development Corporation is located in:
- (a) Mirpur, AJK (b) Islamabad
(c) Lahore (d) None of these
- (10) Stand Table consists of columns showing:
- (a) diameter, number of trees and height (b) diameter and number of trees
(c) number of trees only (d) None of these
- (11) Basal area is determined by measuring diameter:
- (a) near the top of the tree (b) middle of the tree
(c) base of the tree (d) None of these
- (12) Arid Zone Research Institute is located in:
- (a) Bahawalpur (b) Mirpurkhas
(c) Jacobabad (d) None of these
- (13) Climax species of subtropical broad leaved evergreen forests are:
- (a) Shisham and Mulberry (b) Paper Mulberry and Eucalyptus
(c) Oak and Snatha (d) None of these
- (14) Ayubia National Park is located in:
- (a) Rawalpindi (b) Haripur
(c) Chora Gali (d) None of these
- (15) Rain Water Harvesting is a technique applied in areas having rainfall:
- (a) 300 mm (b) 400 mm
(c) 600 mm (d) None of these
- (16) Water Spreading is a technique applied to collect rainfall water into:
- (a) dams and reservoirs (b) streams and rivers
(c) wells and ponds (d) None of these
- (17) Deosai National park is located in:
- (a) AJK (b) NWFP
(c) Balochistan (d) None of these
- (18) Alkaloid Ephedrine is extracted from Ephedra plant which is naturally distributed and managed by the Forest department in the province of:
- (a) Sindh (b) NWFP
(c) Balochistan (d) None of these
- (19) Engineer's Chain used in Chain survey has a length of:
- (a) 100 ft (b) 150 ft
(c) 200 ft (d) None of these
- (20) Formula of glorious simplicity is represented by:
- (a) Annual Yield = Growing Stock/R (b) Annual Yield = $V/2R \times L$
(c) Annual Yield = $4 V/L \times R$ (d) None of these
