

TIME ALLOWED: THREE HOURS

#### FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2016 FOR RECRUITMENT TO POSTS IN BS-17

**Roll Number** 

MAXIMUM MARKS = 20

UNDER THE FEDERAL GO VERNMENT

#### AGRICULTURE & FORESTRY

PART-I (MCQS)

PART-I(MO	CQS): MAXIMUM 30 MINUTES	PART-I (MCQS) PART-II	MAXIMUM MARKS = MAXIMUM MARKS =			
NOTE: (i) (ii)	Part-II is to be attempted on the separatempt ONLY FOUR questions from SECTION. ALL questions carry EQ	om PART-II by selecti	ng <b>TWO</b> questions from <b>E</b> A	АСН		
(iii)	All the parts (if any) of each Questic places.	on must be attempted at	one place instead of at diffe	erent		
(iv) (v)	Candidate must write Q. No. in the Ar No Page/Space be left blank between be crossed.					
(vi)	Extra attempt of any question or any	part of the attempted que	estion will not be considered.			
		ART – II TION – A				
Q. No. 2.	What is the role of live stock in natio over the years promoted this sector? Challenges?			(20		
Q. No. 3.	What is the cause of low productivity production could be made sustainable	-		(20		
Q. No. 4.	How understanding of genetics has h livestock? What are the prospects of Discuss all pros and con?					
Q. No. 5.	What do you understand by soil fertil maintained in good shape? How trees saline soils?	•		(2)		
	SEC	<u>TION – B</u>				
Q. No. 6.	What is the significance of rangeland could effectively be utilized? What crangelands?		•	•		
Q. No. 7.	What are the different grazing system wealth of the country has benefited from	C		ock (20)		
Q. No. 8.	Write short notes on any Four of the a. Soil erosion b. Judicious application of chemical c. Rain water harvesting d. Grain storage and preservation	<u> </u>		(2		
	a. Statif storage and preservation					

e. Agro forestry Vs Farm Forestry

f. Environmentally controlled poultry houses



#### FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2017 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

Roll Number

#### **AGRICULTURE & FORESTRY**

TIME ALLOWED: THREE HOURS PART-I (MCQS) MAXIMUM MARKS = 20
PART-I(MCQS): MAXIMUM 30 MINUTES PART-II MAXIMUM MARKS = 80

NOTE: (i) Part-II is to be attempted on the separate Answer Book.

(ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH

- **SECTION. ALL** questions carry **EQUAL** marks. (iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.
- (iv) Candidate must write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.
- (v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- (vi) Extra attempt of any question or any part of the attempted question will not be considered.

#### <u>PART-II</u> SECTION-I

- Q. No. 2. Energy is driving force for agricultural output. Fossil fuels have aggravated the problem of pollution. What are alternate sources which can be manipulated to earn carbon credit and results in comparable level of farm output with already available sources? Discuss in the light of scientific advancement and economics.
- Q. No. 3. It is well established fact that irrigation water is the most critical factor in crop production and its efficient use is imperative in terms of water scarcity in semi-arid and arid zones of Pakistan. What technological advancements and up-gradations Government Institutions/Organizations at national and provincial levels have imparted in farm water management? Also elaborate environmental and economical issues related with these techniques of farm water management.
- Q. No. 4. What are prospects of biofuels crops in Pakistan? How much land and labour can be allotted for these crops to compromise with cereal and vegetable crops, economically and socially, keeping in view small holdings as some trading corporations have called for a worldwide ban on biofuels production, claiming that it contributes to food shortages?
- Q. No. 5. Rural demography in Pakistan is in transition phase towards mini-urbanization. How can this shift affect gender discrimination and parity in rural societies towards farm income, rural infrastructure and rural livelihood? Can present educational investment in rural areas improve the human resource involvement in the decision making and development? What are prospects of equitable and healthy rural communities in Pakistan?

#### **SECTION-II**

- Q. No. 6. Implications for the Sustainable Forest Management and Livelihoods Security rest on non-participatory roles of human population. How far present forest policies have prevented this role and how can policies be amended to prioritize people involvement in raising forest and plantations? Also elaborate preference of molecular biology over traditional forest breeding to commensurate purposes of ethanobotany, eco-tourism and carbon sequestration
- Q. No. 7. Discuss in detail constraints in new rangelands development in low and high altitudes in Pakistan. What are reasons for degradation of old rangelands? Also explain vision for the formulation of the range policy in the country.
- Q. No. 8. Write short notes on any Four of the following: (5 marks each) (20)
  - (a) Silvopastoral planning
  - (b) Forest and climate change; preparedness and strategies in Pakistan
  - (c) Zero waste agriculture
  - (d) Economic and social impacts of land reforms on rural societies in Pakistan
  - (e) Improvement in animal husbandry practices
  - (f) Biosafety regulations in Pakistan

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Q. No. 8.

wildlife in Pakistan

#### FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2018 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

**Roll Number** 

(20)

#### **AGRICULTURE & FORESTRY**

TIME ALL PART-I(MO	OWED: THREE HOURS CQS): MAXIMUM 30 MINUTES	PART-I (MCQS) PART-II	MAXIMUM MARKS = MAXIMUM MARKS =		
NOTE: (i) (ii)	Part-II is to be attempted on the separ Attempt ONLY FOUR questions fro SECTION. ALL questions carry EQU	om PART-II by selection	ng TWO questions from EA	СН	
(iii)	All the parts (if any) of each Question		one place instead of at differ	rent	
(iv)	places. Candidate must write Q. No. in the Ans	swar Rook in accordance	a with O No in the O Pener		
(v) (v)	No Page/Space be left blank between be crossed.			nust	
(vi)	Extra attempt of any question or any p	part of the attempted que	stion will not be considered.		
Q. No. 2.	Global warming is one of the major the short and long terms, do you suggest benefits of climate change on differencessary.	t to mitigate the negative	ve impacts and to use the	(2	
Q. No. 3.	Pakistan is suffering from serious edible oil deficit. Suggest a strategy integrating agricultural sciences and the Government to improve the present situation.			(20	
Q. No. 4.	Discuss bio-fortification. How is it he to combat with malnutrition? Explain	-	to provide basic human nutrition needs and examples.		
Q. No. 5.	<b>5.</b> Biotechnology offers several opportunities for crop genetic improvement to meet the present and future challenges. Discuss with suitable examples.		=	(20	
	SEC	TION – B			
Q. No. 6.	Green fodder is an excellent and to Pakistan, but it is not available in enterpakistan, how these could be used to it	nough quantities. Many	rangelands are present in	(2	
Q. No. 7.	Forest area in Pakistan is not according	ng to the international st	andards. What public and	(2	

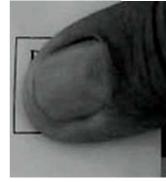
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Discuss the current situation and suggest prioritize strategies to improve forest based

government can do to improve forests area in Pakistan? Discuss in detail.



# FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2019 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT



#### AGRICULTURE & FORESTRY

TIME ALLOWED: THREE HOURS PART-I (MCQS) MAXIMUM MARKS = 20
PART-I (MCQS): MAXIMUM 30 MINUTES PART-II MAXIMUM MARKS = 80

NOTE: (i) Part-II is to be attempted on the separate Answer Book.

- (ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH SECTION. ALL questions carry EQUAL marks.
- (iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.
- (iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- (v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- (v i) Extra attempt of any question or any part of the question will not be considered.

#### PART - II SECTION - I

- Q.No. 2. What is the role of natural resources (soil, water and solar energy) in crop production?

  Discuss innovative and technologically advanced approaches that could be used to improve efficiency of these resources.
- Q. No. 3. Why is it considered necessary to keep pest population down for a good crop production? Discuss integrated management and control practices for agricultural pests and diseases taking account of effectiveness, economic and environmental acceptability of these practices.

What are the main issues of livestock, fisheries and cottage industries in Pakistan? (20) Discuss options for improvement of these industries in the country taking account of market risks and government policies.

Q. No. 5. Agricultural biotechnology is conirilered a short gun approach to improve the productivity of traditional agriculture systems. What is the scope of this technology in Pakistan. Discuss in the lightsible desible benifits and risks related to embracing different types of biotechnology.

#### **SECTION II**

- Q. No. 6. What combination of forestry, agroforestry, grass cover, water collecting systems and storage facilities, drought resident crops and water saving technologies are needed in dryland areas of Pakistan in order to increase food production and to what extent they can be cost effective?
- Q. No. 7. In view of the present status of forests in Pakistan, what and as the most practical and economical methods of wood utilization in general and in and based industry country in particular?
  - Why is rangeland so important for agricultural economy of P 1 tm 1 xplan the need ways and means for integrated management of grazing lands, er op ad and avestock production in Pakistan.



### FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2020 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

Roll Number

#### **AGRICULTURE & FORESTRY**

TIME ALLOWED: THREE HOURS PART-I(MCQS): MAXIMUM 30 MINUTES		PART-I (MCQS) PART-II	MAXIMUM MARKS = 20 MAXIMUM MARKS = 80			
NOTE: (i) Part-II is to be attempted on the separate Answer Book.  (ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH SECTION. ALL questions carry EQUAL marks.  (iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.  (iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.						
(v) (vi)	(v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.					
PART-II SECTION-A						
Q. No. 2.	What do you understand by soil fer maintained in good shape? How trees saline soils?			(20)		
Q. No. 3.	Discuss the role of integrated nutrient	management to sustain so	oil quality and fertility.	(20)		
Q. No. 4.	Food security, food safety and climate change are the main challenges at national level. What are various factors associated with these issues and how can we tackle them?					
Q. No. 5.	What is the role of cottage industry in improving the rural development? What are the major cottage industries linked to agriculture and livestock?					
SECTION-B						
Q. No. 6.	What is the status and significance of are different grazing systems in voguthe country has benefited from existing	ue for small ruminants? H	How livestock wealth of	(20)		
Q. No. 7.	What are the differences amongst agrestate forests? Describe the significant camaldulensis is not recommended for	nce of agroforestry in Pal	-	(20)		
Q. No. 8.	Which are the major wood based important for these industries? How		<del>-</del>	(20)		

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in Pakistan?



## FEDERAL PUBLIC SERVICE COMMISSION COMPETITIVE EXAMINATION-2022 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

Roll Number

#### **AGRICULTURE & FORESTRY**

TIME ALI PART-I(M	LOWED: THREE HOURS ICQS): MAXIMUM 30 MINUTES	PART-I (MCQS) PART-II	MAXIMUM MARKS = MAXIMUM MARKS =	
	Attempt ONLY FOUR questions from SECTION. ALL questions carry EQU All the parts (if any) of each Question places.	m PART-II by selecti JAL marks.  n must be attempted at	one place instead of at dif	
(iv (v) (vi	No Page/Space be left blank between the crossed.	the answers. All the bl	ank pages of Answer Book	x must
(12)	PA	RT-II FION-A		
Q. No. 2.	What is Integrated Plant Nutrient Marefficiency can be improved?. How agree be best utilized as plant nutrient?			(20)
Q. No. 3.	Describe present Cotton scenario, cause challenges ahead. How past glory of cot	*	· ·	(20)
Q. No. 4.	No. 4. What factors influence seed germination? How seed viability is affected during storage? What is informal seed sector? Discuss advantages and disadvantages of informal seed sector.			
Q. No. 5.	<ul> <li>Write notes on:</li> <li>(a) Potential and issues of small demountainous areas of Pakistan.</li> <li>(b) Advantages and disadvantages of the control of the contro</li></ul>			(20)
	SECT	ΓΙΟΝ-Β		
Q. No. 6.	Discuss objectives and basis of convent the distribution of forests in Pakistan.	ional forest classificati	on in Pakistan. Describe	(20)
Q. No. 7.	Describe role of agro-forestry in for different range areas have played their r			(20)
Q. No. 8.	<ul><li>Write notes on:</li><li>(a) Principles of forestry.</li><li>(b) Silvicultural systems.</li></ul>		(10 each)	(20)

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#### FEDERAL PUBLIC SERVICE COMMISSION **COMPETITIVE EXAMINATION-2023** FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

**Roll Number** 

AGRICULTURE & FORESTRY

TIME ALLOWED: THREE HOURS PART-I (MCQS) MAXIMUM MARKS = 20**PART-I(MCQS): MAXIMUM 30 MINUTES PART-II** MAXIMUM MARKS = 80

NOTE: (i) Part-II is to be attempted on the separate Answer Book.

- (ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH **SECTION**. **ALL** questions carry **EQUAL** marks.
- (iii) All the parts (if any) of each Question must be attempted at one place instead of at different
- (iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.
- (v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- (vi) Extra attempt of any question or any part of the question will not be considered.

### **SECTION-A**

- Rural development has offered more scope under the urbanization trend in Pakistan. Q. No. 2. (20)Discuss on the current scenario, issues, steps taken in past and your vision for the paradigm change in rural development.
- Integrated agriculture is an approach for sustainability of resources, profitability of Q. No. 3. (20)farmers and economic growth of the country. Discuss the issues and solutions for the adoption of integrated agriculture in Pakistan.
- Q. No. 4. Give an overview of rainfed agriculture in Pakistan. Discuss the issues, opportunities (20)and give an insight into the actions required in order to realize the full potential of these areas to contribute in overall performance of agriculture in Pakistan.
- Q. No. 5. Write short notes on the following:
  - (a) Agricultural practices to slow down the climate change
  - **(b)** GMO and consequences
  - (c) Precision agriculture

  - (d) Failure of cotton crop in Pakistan

#### **SECTION-B**

- Discuss on the degradation of old forests and values of the newly developed Q. No. 6. (20)rangelands in Pakistan. Also describe your vision to conceive climate smart polices for forests sustainability.
- Rangelands have considerable role in agricultural economy of Pakistan. Explain Q. No. 7. (20)different ways and means for integrated management of rangelands and livestock production keeping in view the climate change in Pakistan.
- Write short notes on any four of the following: Q. No. 8.

**(5-Each)** (20)

**(5-Each)** 

(20)

- **(i)** Laws of forests and wildlife in Pakistan.
- (ii) Land reforms and its impact on agroforestry.
- (iii) Wood based industries in Pakistan.
- Social forestry and its value. (iv)
- **(v)** Issues relating to Shesham and Eucalyptus
- Watershed management (vi)

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#### FEDERAL PUBLIC SERVICE COMMISSION **COMPETITIVE EXAMINATION-2024 FOR RECRUITMENT TO**

POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

#### **AGRICULTURE & FORESTRY**

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(PART-I MCQs)	<b>MAXIMUM MARKS: 20</b>

**Roll Number** 

PART-I (MCQs) : MAXIMUM 30 MINUTES (PART-II) **MAXIMUM MARKS: 80** NOTE: (i) First attempt PART-I (MCQs) on separate OMR Answer Sheet which shall be taken back

	after 30 minutes.  (ii) Overwriting/cutting of the options/answers		$\overline{\mathcal{C}}$	lit.	
Ĺ	(iii) There is no negative marking. All MCQs mus  PART-I (MCQs)(COMI				
0.1	. (i) Select the best option/answer and fill in the appropriate		<u> </u>	Answ	er Sheet.(20x1-20)
<b>~.1</b>	(ii) Answers given anywhere else, other than OMR Answer				
1.	Which soil type has the smallest particle size?				
-	(A) Sand (B) Silt	(C)	Clay	(D)	None of these
2.	Optimal pH range for most crops is:	. /	-	. /	
	(A) 3-5 (B) 6-7	` ′	8-10		None of these
3.	The process of breaking down organic matter into simple		-	_	
	(A) Photosynthesis (B) Respiration	. ,	Decomposition	, ,	
4.	The practice of growing two or more crops in proximity t				
_	utilization is: (A) Crop rotation (B) Monoculture		Agroforestry	(D)	None of these
5.	The cultivation of crops without the use of soil is known				
,	(A) Hydroponics (B) Aeroponics			•	O) None of these
6.	The hormone, responsible for promoting cell elongation				
7	(A) Auxin (B) Gibberellin		Cytokinin		None of these
7.	The process of exposing seeds to moisture and temperat				
0	(A) Stratification (B) Scarification	` /	Vernalization	(D)	None of these
8.	The primary role of pheromones in pest management is:				\
0	(A) Killing pests directly (B) Repelling pests (C) Attra			ing (D	None of these
9.	Which insect order includes pests such as grasshoppers a			( <b>D</b> )	NI.
10	(A) Orthoptera (B) Coleoptera		Lepidoptera	(D)	None of these
10.	The primary purpose of backcrossing in plant breeding is		Into-1	:	. ده ماند
	(A) Creating hybrids with increased heterozygosity		Introducing res	ıstance	e to diseases
11	(C) Fixing desirable traits in a new genetic background	(D)	None of these		
11.	The primary purpose of sustainable forestry is:  (A) Timber extraction only	(D)	Marini-i 1	ort to	m profits
	(A) Timber extraction only (C) Clear cutting for quick land regeneration		Maximizing she	ort-ter	m proms
12	(C) Clear-cutting for quick land regeneration  The term "silviculture" refers to:	(D)	None of these		
12.	The term "silviculture" refers to:  (A) Regring of silkworm	(D)	Forest diagram	nonce	amant
	<ul><li>(A) Rearing of silkworm</li><li>(C) Cultivation of trees and forests</li></ul>	. ,	Forest disease r None of these	manag	CHICHI
13.	Which of the following is a common invasive species affe	` ′			
ıIJ.	(A) Oak tree (B) Eucalyptus tree	·	Kudzu vine	(D)	None of these
14.	In forestry, the term "coppicing" refers to:	(C)	INGGEG VIIIC	(D)	THORE OF HIESE
٠4.	(A) Planting new trees (B) Pruning branches (C) Th	innin	g the forest cano	nv (r	)) None of these
15.	Which type of forest management aims to mimic natural				
ı J.	(A) Even-aged management (B) Shelterwood cutting (C				
16.	The practice of removing dead or diseased trees from a f				(2) I tolle of these
	(A) Salvage logging (B) Pruning		Clear-cutting	(D)	None of these
17.	Regeneration of a forest without direct human intervent	` ′		(2)	
	(A) Reforestation (B) Afforestation		Rehabilitation	(D)	None of these
18.	The primary purpose of riparian forest buffers is:	(-)			5110 OI HIOSO
٥.	(A) Soil erosion prevention (B) Wildlife habitat conservati	ion (C	) Carbon seques	tration	(D) None of these
19.	Which international agreement focuses on combating ille				
•	harvested timber?	J ·	00 0 p. 011	g	- 3 1
	(A) Kyoto Protocol (B) Forest Law Enfo	orcen	nent, Governance	and '	Trade (FLEGT)
	(C) Nagoya Protocol (D) None of these	2 211	.,	,	
20.	In the context of biodiversity the term "keystone species	s" refe	ers to:		
	(A) Species that are abundant in number				

(B) Species that play a crucial role in maintaining ecosystem structure (C) Species that are endemic to a specific region (D) None of these

#### **PART-II**

- NOTE: (i) Part-II is to be attempted on the separate Answer Book.
  - (ii) Attempt **ONLY FOUR** questions from **PART-II** by selecting **TWO** questions from **EACH SECTION**. **ALL** questions carry **EQUAL** marks.
  - (iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.
  - (iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.
  - (v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
  - (vi) Extra attempt of any question or any part of the question will not be considered.

#### **SECTION-A**

- Q. No. 2. Explore the present situation of oilseed crops in Pakistan and identify potential factors contributing to the insufficient production of edible oil. Propose remedial measures aimed at enhancing this situation.
- Q. No. 3. Examine the distinctions between organic farming and conventional farming practices. Analyze the merits and drawbacks of each method. Evaluate factors such as environmental impact, yield, and soil health to provide a comprehensive understanding of the advantages and disadvantages associated with both approaches. Which would you recommend in Pakistan's perspective?
- Q. No. 4. Assess the impact of climate change on Pakistan's agriculture, particularly its effects on crop patterns and yields. Provide an analytical overview of current practices and propose strategies to make crop management more resilient to climate change, considering adaptation and mitigation measures.
- Q. No. 5. Write short notes on the following: (10 each)
  - (a) Conservation and utilization of plant genetic resources
  - (b) Integrated nutrient management

#### **SECTION-B**

- Q. No. 6. How can integrated watershed management address the competing demands for water in agriculture, industry, and domestic use? Analyze the impact of deforestation on watershed health and water availability. How can we integrate science and community engagement in watershed management?
- Q. No. 7. How effectively does the Pakistan Forest Policy integrate with the provisions outlined in the Pakistan Forest Act? Provide specific examples that how the policy's strategic goals are translated into actionable legal measures within the act. Discuss any areas where alignment may be strengthened or improved for more coherent forest governance.
- Q. No. 8. Write short notes on the following: (10 each)
  - (a) Potential of Ecotourism in Pakistan
  - **(b)** Biodiversity

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