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.

PART-II
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. **(20)**

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. **(20)**

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? **(20)**

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? **(20)**

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 **(20)**

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. **(20)**

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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