

DEPARTMENTAL PROMOTION EXAMINATION FROM RESEARCH OFFICER TO SENIOR RESEARCH OFFICER (AGRONOMY)

PAPER-I

CURRENT AFFAIRS & RULES & REGULATIONS

100 marks

(Note: Passing in each part is mandatory to clear paper-1)

(Pass marks 47)

Part-I

Current Affairs

33 marks (Pass marks 40%)

Current Affairs paper will be set from leading issues published in the newspaper for the last 3 months. The following books may be consulted.

- Monthly Current Affairs Digest by Tariq Mahmood Dogar
- Monthly Current Affairs Digest by Dr. Safdar Mahmood
- Any other Current Affairs Digest

Part-II

Rules and Regulations (Books allowed)

67 marks

(Pass marks 50%)

- The Pakistan WAPDA Employees (E&D) Rules, 1978
- The Pakistan WAPDA Employees (Retirement) Rules, 1979
- The Pakistan WAPDA Leave Rules for WAPDA Employees 1982
- The Pakistan WAPDA TA Rules 1982
- WAPDA Act
- Conduct Rules
- Medical Attendance Rules.

Reference Books

WAPDA Manual of General Rules amended upto 2014 (including addendums)

PAPER-II

TECHNICAL

100 Marks (Pass marks 50)

THE PLANT ENVIRONMENT

Crops: Crop classification/inventory, Crop Stand, Weed, Disease, Pests, Potential and Actual Yields, Crop Quality and Optimum Recommendation, Saline Culture and Salt Tolerant Crops/Grasses and trees.

Soils: Soil nutrient and supply, Soil root zone (Physical and Chemical Properties), Sub soil properties, Topography, Land capability and Soil hazards (Salinization, Waterlogging, Reclamation) and Soil amendments/conditioners. Management techniques of saine soils.

Climate: Climate Data, Climate Hazards and Drought Management Practices

Irrigation Water: Source and availability, Potential and actual evapo-transpiration (crop water requirement, Irrigation timing and application (methods) and efficiencies. Irrigation water quality, use of Brackish Drainage Effluent/Groundwater

FARM MANAGEMENT PRACTICES

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Inventories of Actual Practices: Land including seed bed preparation, Fertilizer Methods (Type, Timing, Rate), Tillage Methods, Seeding Methods (Rate and Timing), Irrigation practices and behaviour (Type, Timing and Management), Weeding and inter culture and harvesting and Storage

Cropping Pattern: Intensities, Rotations, Crop Mixes and Poly culture

Agricultural Mechanization in Pakistan: Present position in Pakistan, farm mechanization indispensable for modernizing agriculture and recommendations

RESOURCES INVENTORY AND COMPOSITE FARM BUDGETS

On-Farm Water Practices: On farm water management and drainage, Resources available to the farmers, Production and production factors prices, Govt. policies past, present and planning and Outputs

Agrarian Structure and Policy: Land use, Farm size and tenure, Land Revenue regulations, Land Water right interface, Type of farm operations, Distribution of farm inputs, Dejure Vs Defacto Practices and Field and Basin size and levelness

Agricultural; Organizations: Organizations and institutions, Agri-educational institutes, Agri-research in Pakistan, Agri-extension in programmes and Water Users Associations

Computer (Information Technology): Introduction to Computer System, M.S. Word and M.S. Office: Characteristic of computer, types of computer, computer hardware and software, types of memory and functions, operating systems, input/out and storage devices, types of computer languages, programming and functions of compiler, main features of utility of MS Word, MS Excel, MS Power Point, Internet and E-mail.

Reference Books

- Economic Survey of Pakistan GOP (Latest Issue).
- Agri. Statistics of Pakistan GOP (Latest Issue).
- Annual Review, World Bank (towards environmentally and socially sustainable development 1999).
- Production of field crops by Wolfe and Kipps.
- Zaraai Diary Agricultural Directorate, Govt. of the Punjab published by PAD & SC.
- Irrigation Principles and Practices by O.W. Esraelson.
- Training manual for Agricultural Water Management Specialist by Dewayne G. Westfall, Water Management "Technical Report No. 60".
- Microsoft Office 2007/2010, by Gary B. Sheily, Thomas J. Cashman and Misty E. Vermaat.
- Window 7 Step by Step by Joan Lambert and Joyce Cox (Available Online).

NOTE (1) One question from Computer (Information Technology) is **compulsory** to be included in Paper-II (Technical).

NOTE (2): The paper will be 50% objective and 50% subjective.

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