Civil Services (Main) Examination, 2003

AGRICULTURE

(Paper I)

Time Allowed : Three Hours **Maximum Marks : 300**

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.
Candidate has to attempt FIVE questions in all.
Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.
The number of marks carried by a question/part is indicated against it.
Wherever any assumptions are made for answering a question, they must be clearly indicated.
Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write short notes in about 200 words each on any three of the following: **20×3=60**

- **(a)** Sustainable agriculture
- **(b)** Environmental pollution hazards to crops
- **(c)** Shifting cultivation and Taungya system
- **(d)** Fixation of phosphorus and potassium in soil

2. Write the characteristics and process of formation of acidic soil. What part of India is affected by acidic soils? How these soils can be cultivated for efficient crop production? **60**

3. What are the losses caused by weeds? Suggest chemical control of weeds in direct sown and transplanted rice, wheat, maize, sugarcane and soybean. **60**

4. Give in tabular form seeding time, seeding rate, spacing, fertilizer and average yield per hectare in India of maize, wheat, cotton, potato, pigeonpea and groundnut for higher production. **60**

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each: **20×3=60**

- **(a)** Water harvesting and run-off recycling
- **(b)** Carbon: Nitrogen ratio
- **(c)** Law of diminishing return
- **(d)** Cooperative marketing and regulated market

6. What are the major challenges in agriculture and food security in our quest for elevating and stabilising crop yields and remunerative self-employment? Suggest measures which can help to meet these challenges. **60**

7. Differentiate dryland agriculture from rainfed agriculture. Suggest soil and water conservation measures and management practices to improve productivity in dryland areas. **60**

8. What is water use efficiency? Enlist the factors affecting water use efficiency. Suggest measures to increase water use efficiency in crops. **60**

English version compiled from published transcriptions and cross-checked across sources; not a facsimile of the official UPSC question paper.

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