#### CLASS : 10th (Secondary)

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#### MARKING INSTRUCTIONS AND MODEL ANSWERS

## कृषि

#### AGRICULTURE

(Academic/Open)

(Only for Fresh Candidates)

उप-परीक्षक मूल्यांकन निर्देशों का ध्यानपूर्वक अवलोकन करके उत्तर-पुस्तिकाओं का मूल्यांकन करें। यदि परीक्षार्थी ने प्रश्न पूर्ण व सही हल किया है तो उसके पूर्ण अंक दें।

#### General Instructions :

- *(i)* Examiners are advised to go through the general as well as specific instructions before taking up evaluation of the answer-books.
- (ii) Instructions given in the marking scheme are to be followed strictly so that there may be uniformity in evaluation.
- *(iii) Mistakes in the answers are to be underlined or encircled.*
- *(iv)* Examiners need not hesitate in awarding full marks to the examinee if the answer/s is/are absolutely correct.
- (v) Examiners are requested to ensure that every answer is seriously and honestly gone through before it is awarded mark/s. It will ensure the authenticity as their evaluation and enhance the reputation of the Institution.

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- *(vi)* A question having parts is to be evaluated and awarded partwise.
- (vii) If an examinee writes an acceptable answer which is not given in the marking scheme, he or she may be awarded marks only after consultation with the head-examiner.
- (viii) If an examinee attempts an extra question, that answer deserving higher award should be retained and the other scored out.
- (ix) Word limit wherever prescribed, if violated upto 10%. On both sides, may be ignored. If the violation exceeds 10%, 1 mark may be deducted.
- (x) Head-examiners will approve the standard of marking of the examiners under them only after ensuring the non-violation of the instructions given in the marking scheme.
- (xi) Head-examiners and examiners are once again requested and advised to ensure the authenticity of their evaluation by going through the answers seriously, sincerely and honestly. The advice, if not headed to, will bring a bad name to them and the Institution.

### महत्त्वपूर्ण निर्देश :

(i) अंक-योजना का उद्देश्य मूल्यांकन को अधिकाधिक वस्तुनिष्ठ बनाना है। अंक-योजना में दिए गए उत्तर-बिन्दु अंतिम नही है। ये सुझावात्मक एवं सांकेतिक है। यदि परीक्षार्थी ने इनसे भिन्न, किन्तु उपयुक्त उत्तर दिए हैं, तो उसे उपयुक्त अंक दिए जाएँ।

- (ii) शुद्ध, सार्थक एवं सटीक उत्तरों को यथायोग्य अधिमान दिए जाएँ।
- (iii) परीक्षार्थी द्वारा अपेक्षा के अनुरूप सही उत्तर लिखने पर उसे पूर्णांक दिए जाएँ।
- (iv) वर्तनीगत अशुद्धियों एवं विषयांतर की स्थिति में अधिक अंक देकर प्रोत्साहित न करें।
- (v) भाषा-क्षमता एवं अभिव्यक्ति-कौशल पर ध्यान दिया जाए।
- (vi) मुख्य-परीक्षकों/उप-परीक्षकों को उत्तर-पुस्तिकाओं का मूल्यांकन करने के लिए केवल Marking Instructions/ Guidelines दी जा रही है, यदि मूल्यांकन निर्देश में किसी प्रकार की त्रुटि हो, प्रश्न का उत्तर स्पष्ट न हो, मूल्यांकन निर्देश में दिए गए उत्तर से अलग कोई और भी उत्तर सही हो तो परीक्षक, मुख्य-परीक्षक से विचार-विमर्श करके उस प्रश्न का मूल्यांकन अपने विवेक अनुसार करें।

# *Note :* Out of first *four* questions only *three* are to be answered each has four marks.

1. Rice is very important food grain crop and it require lot of water to grow. It is grown almost throughout the country. In Haryana it is grown in many district such as Karnal, Kurukshetra, Sonipat, Hissar, Fatehabad, Sirsa, Bhiwani, Palwal, Rohtak, Yamuna Nagar and also in parts of all other districts expect Mohindergarh. Its main varieties are IR-8, PR-106, HKR- 120, Pusa

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Basmati, Pusal121, PR- 116, IR-64 etc. Normally Rice sown by transplanting and can be directly sown also. It is transplanted in the month of July and goes up to August.

Main diseases are bacterial leaf blight, brown spot, false smut, stem rot, and pest which attack the rice crop are thrip, leaf hopper, stem borer etc.

- 2. Onion is very popular and almost it is used by all households. It is grown in many parts of India but main producing state is Mahrastra in around Nasik area. It is used in many ways as part of vegetables both in cooking and also used as raw. It is also used as pickle. It is sown both in Rabi and Kharif. Its main varieties for Rabi are Hisar-2, Push red, Push white, Punjab 48, Punjab selection while for Kharif are An-53, Agrifound dark red. It sown mostly by raising nursery and sown directly with small bulb. After digging it is dried in the shade and stored in the jute bags in the airy shed.
- **3.** Gram is another important food grain crop, which a very rich source of protein. It is mainly cultivated in the dry land areas because this crop require very less water. Areas are in the districts of Bhiwani, Mohindergarh, Rewari, Hissar, Jhajjar, and parts of Sirsa, Ambala, Kaithal etc. Its main varieties are HC-1, HC-3, HC-5, Haryana Chana No. 1, Aadhar etc. Seed rate is about 16 Kg/acre. It is sown in rows by plough with the help of pora or with drill. It is mostly sown in October.

Its area is decreasing year after year due the risk involved with this. Some time diseases can ruin the whole crop. Other reason is that in the areas where it was grown is having brackish water for which this crop is very sensitive. Wild life damage is another reason of reducing its area.

- 4. Tillage main, implements are Ploughs, cultivators, disc harrows, triphalis, rotavators, zero tillage machine, plankers etc. Sowing equipment are seed drills, seed cum fertilizers drills, Pora mounted on plough and planters, while harvesting and threshing are reaper, combine harvester, drummy, diggers etc.
- 5. (i) Grain crops are bajra (Millets), maize, 'gram and other pulses, wheat, barley, fruits are citrus, ber, kair, guava and vegetables are chilies, tomato, brinjals, cluster beans, etc.
  - (ii) Drains are needed where natural drainage is absent and excess water is not possible to take out. Area is low lying and is having closed drainage. These areas are in the districts of Rohtak, Sonipat, Jind ,Kaithal, Hissar, Sirsa, Jajhar, Nuh, Bhiwani etc.
  - (iii) Tractors used in Haryana are of many type of various manufactures such as of Ford, Escort, Mohindra, Sawraj, Massey fergusion, Sonalika, New Holland, Eicher etc. These are used for cultivation, sowing of crops, threshing, transportation etc.
  - (iv) Mushroom cultivation is a small farming where even man without farm land can do this. Mushroom can be done in a room

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where other parameters of growth are needed like moisture, light etc. Its main requirements are spawn, oil mixed with wheat or paddy straw (properly mixed) and disinfected, bags.

- (v) Vegetables grown in winter are potato, carrot, radish, turnip, methi, cauliflower, spinach, garlic etc.
- (vi) Its main varieties are Rh-3D, Laxmi, Pusa Bold, Rh-781, Vasundhra, T-59 Swaran jyoti etc. Seed rate is about 5 kg per hectare.
- (vii) Commercial crops are sugarcane, cotton, tobacco, tea, oil seeds, sunhemp (patsan), groundnut.
- 6. (i) Mulberry plantation is very useful, its leaves are used to feed silk worms which are used for the preparation of silk. Plantation can go for many years.
  - (ii) Moisture conserving methods are proper bunding of fields, planking after ploughing, deweeding, mulching and use of ridge and furrows for sowing etc.
  - (iii) Yes canals can work as drains when made by digging. In digging canal is in the lower area so it can take excess water if it is put into it by gravity also otherwise if canal on higher area then water is to be put by lifting it.
  - (iv) Transportation of input and output in and from the fields is done by bullock-carts, tractor-trolley and even donkeys and camels are also used for taking out fodder etc.

- (v) Vegetables used for making pickles are carrot, radish, garlic, turnip, chilies, cauliflowers, peas etc.
- (vi) Keeping qualities of potato, onion, garlic, red chilies, pumpkin etc. are good.
- (vii) Name of hand tools are sickle, hand hoe, spades with long handle and short handle, sprayers, caricature, wheel hand hoe etc.
- (viii) Main varieties of barley are PI-426, BCU-393, BH-393, DWRUB-52, BH-75, PU-72.
- (ix) Summer vegetables are pumpkin, lady's finger, gourd(Tori), summer squash(chapan kadu), Tinda, cucumber, beans, bottle gourd(Ghia).
- (x) Fodder crops are barseem, Jawar, Bajra, maize, lucren, wheat straw, gram straw, jai etc.
- Only *twelve* are to be answered, each has *one* mark. Answers are to be given in *right* or *wrong*:
  - (i) Right
  - (ii) Right
  - (iii) Wrong
  - (iv) Wrong
  - (v) Right

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(vi) Right

(vii) Wrong

(viii) Right

(ix) Wrong

(x) Right

(xi) Wrong

(xii) Wrong

(xiii) Wrong