

0809795

कुल पृष्ठ संख्या—32 (कवर पेज सहित)

क्रम संख्या.....



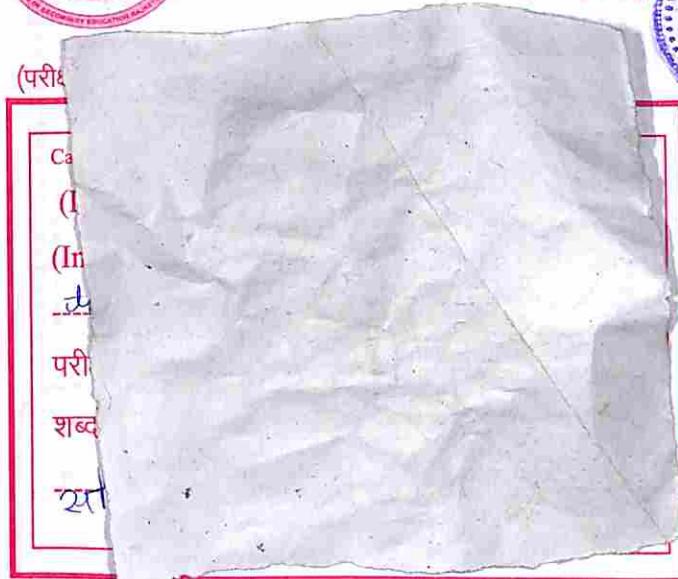
माध्यमिक शिक्षा बोर्ड, राजस्थान, अजमेर

उच्च माध्यमिक परीक्षा



(परीक्षा

Ca
(L
(In
परी
शब्द
या



नोट :— परीक्षार्थी उपरोक्त के अतिरिक्त उत्तर पुस्तिका के अन्य किसी भी भाग में अपना नामांक नहीं लिखें।

माध्यम — हिन्दी अंग्रेजी

विषय Agriculture

परीक्षा का दिन Thursday

दिनांक 21/04/2022

नोट :— परीक्षार्थी के लिए आवश्यक निर्देश इस पृष्ठ के पिछले भाग पर उल्लेखित हैं। जिन्हें सावधानी पूर्वक पढ़ लें व पालना अवश्य करें।

- परीक्षक हेतु निर्देश :— (1) परीक्षक को उपरोक्त सारणी अनुसार प्राप्तांक भरना अनिवार्य है, अन्यथा नियमानुसार दंडित किया जायेगा।
 (2) परीक्षक उत्तर पुस्तिका के अन्दर के पृष्ठों के बायीं ओर निर्धारित कॉलम में लाल इंक से अंक प्रदत्त करें।
 (3) कुल योग भिन्न में प्राप्त होने पर उसे पूर्णांक में ही परिवर्तित कर अंकित करें (उदारणार्थ : 15 $\frac{1}{4}$ को 16, 17 $\frac{1}{2}$ को 18, 19 $\frac{3}{4}$ को 20)

प्रश्नों की क्रम संख्या	प्राप्तांक	प्रश्नों की क्रम संख्या	प्राप्तांक
1	9	19	4
2	4	20	4
3	8	21	
4	1 $\frac{1}{2}$	22	
5	1 $\frac{1}{2}$	23	
6	1 $\frac{1}{2}$	24	
7	1 $\frac{1}{2}$	25	
8	1 $\frac{1}{2}$	26	
9	1 $\frac{1}{2}$	27	
10	1 $\frac{1}{2}$	28	
11	1 $\frac{1}{2}$	29	
12	1 $\frac{1}{2}$	30	
13	1 $\frac{1}{2}$	31	
14	1 $\frac{1}{2}$	योग	56
15	1 $\frac{1}{2}$	प्राप्त अंकों का कुल योग (Round off)	
16	3	अंकों में शब्दों में	
17	3		कृपया
18	3		

परीक्षक के हस्ताक्षर संकेतांक 3 7 8 8 0

प्रमाणित किया जाता है कि इस उत्तर पुस्तक के निर्माण में 58 जी.एस.एम. इको मैपलियो कागज ही उपयोग में लिया गया है। 169/2021

परीक्षार्थियों के लिए आवश्यक निर्देश

1. समस्त प्रश्नों का हल निर्धारित शब्द सीमा में इसी उत्तर पुस्तिका में करना है। विशेष परिस्थिति में अतिरिक्त उत्तर पुस्तिका पृथक से उत्तर पुस्तिका भरी हुई होने पर पर्यवेक्षक एवं वीक्षक की अनुशंसा पर ही उपलब्ध कराई जायेगी।
2. प्रश्न—पत्र पर निर्धारित स्थान पर अपना नामांक लिखें।
3. प्रश्न—पत्र हल करने के पृश्चात् जिस पृष्ठ पर हल समाप्त होता है, उस पर अन्त में 'समाप्त' लिखकर अन्त के सभी रिक्त पृष्ठों को तिरछी लाईन से काटें।
4. निम्न बातों का विशेष ध्यान रखें अन्यथा अनुचित साधनों की रोकथाम अधिनियम के तहत कार्यवाही की जा सकेगी।
 - (i) उत्तर पुस्तिका के ऊपर/अन्दर तथा प्रश्नोत्तर के किसी भी भाग में चाही गई सूचना के अलावा अपना नामांक, नाम, पता, फोन नम्बर अथवा पहचान की कोई अन्य प्रकार की सूचना आदि अंकित नहीं करें अन्यथा "अनुचित साधनों के प्रयोग" के अन्तर्गत कार्यवाही की जावेगी।
 - (ii) उत्तर पुस्तिका के पृष्ठों को फाड़ें नहीं। उत्तर—पुस्तिका के मुख पृष्ठ पर अंकित संख्या के अनुसार पृष्ठ पूरे होने चाहिये। परीक्षार्थी उत्तरपुस्तिका प्राप्त करते ही पृष्ठ संख्या की जाँच कर लें यदि पृष्ठ कम/अधिक या क्रम में नहीं हैं तो वीक्षक से तुरन्त बदलवा लें।
 - (iii) परीक्षा केन्द्रों पर पुस्तक, लेख, कागज, केलक्यूलेटर, मोबाईल, पेजर आदि किसी भी प्रकार का इलेक्ट्रोनिक उपकरण तथा किसी भी प्रकार का हथियार आदि ले जाना निषेध है।
 - (iv) वस्त्र, स्केल, ज्योमेट्री बॉक्स पर कुछ भी न लिखकर लावें। टेबुल के आस—पास कोई अवैध सामग्री नहीं होनी चाहिये, इसकी जाँच कर लें।
 - (v) अपनी उत्तर पुस्तिका/ग्राफ/मानचित्र आदि परीक्षा भवन से बाहर ले जाना दण्डनीय अपराध है, अतः परीक्षा समाप्ति पर उत्तर पुस्तिका वीक्षक को बिना सौंपे परीक्षा कक्ष नहीं छोड़ें।
5. उत्तरों को क्रमानुसार एक ही स्थान पर लिखें। प्रश्न क्रमांक भी सही अंकित करें, अन्यथा दण्ड स्वरूप परीक्षक को 1 अंक कम करने का अधिकार है। बीच में उत्तर पुस्तिका के पृष्ठ रिक्त न छोड़ें। गणित विषय के लिए रफ कार्य उत्तर पुस्तिका के अंतिम पृष्ठों पर करें तथा तिरछी रेखा से काटें।
6. जहाँ तक हो सके प्रश्न के सभी भाग के उत्तर, उत्तर पुस्तिका में एक ही स्थान पर अंकित करें।
7. भाषा विषयों को छोड़कर शेष सभी विषयों के प्रश्न—पत्र हिन्दी—अंग्रेजी दोनों भाषा में मुद्रित हैं। किसी भी प्रकार की त्रुटि/अन्तर/विरोधाभास होने पर हिन्दी भाषा के प्रश्न को ही सही माना जाये।

परीक्षक द्वारा
प्रदत्त अंकप्रश्न
संख्या

परीक्षार्थी उत्तर

Q1 MCQs

(C) - Block quarter(D) - Free martin(D) - Mumbai(A) - 30 x 30 x 30 cm(C) - Lime(B) - Papaya(A) - Paddy(B) - 500 - 800 mm(A) - 20 - 25 kg (B) - 40 - 45 kg

BSER-169/2021

Q2 Fill in the blanks

MetabolicPomegranateCrapeMoth

परीक्षक द्वारा
प्रदत्त अंकप्रश्न
संख्या

परीक्षार्थी उत्तर

Q3

i
=

Answer in one word or one line

Critical stage of irrigation in mustard crop is-
Before floweringii
=Two external parasites found in animals are flea
and ticks and mitesiii
=Decrease in milk production is a symptom
of sick animal.iv
=Plant to plant distance in Papaya orchard
should be 3 metrev
=Potassium meta bisulphite and Sodium benzoate
are used as Chemical preservative substances.vi
=When two or more than two crops are
grown on same land without row maintaining
is known as Mixed Croppingvii
=The physical substance like black film,
crop straw or residues, plastic sheet used
for mulching is known as mulchviii
=

Holstein Friesian is an exotic breed of cow.

(B)

Short answers

Q4 Agronomy has very essential role in agriculture



production because agronomy includes seed treatment, tillage, crop production etc. and without them production in agriculture field is not possible. That is why, agronomy is an important perspective for agriculture.

Q5 The property of soil to supply all beneficial nutrients to plants and to increase their production is known as soil fertility. If soil will be fertile then crop growing on it will also give higher production. Soil fertility is an important component of soil productivity.

BSER 10/9/2021

Q6 Mechanical measures for weed control :-

i) Hand pulling \Rightarrow This is oldest method of weed control and most effective in small land. This is mostly used in annual weed.

ii) Mulching \Rightarrow Covering upper layer of soil with crop straw or residue is known as mulching. By mulching weed plant will not get enough sunlight and photosynthesis process will hinder, and it will lead to death of weed.

iii) Soil solarization \Rightarrow When soil is covered with black plastic film, then the temperature of soil increases by $8-10^{\circ}\text{C}$ and increases



in temperature causes death of weed plant

- Q7 Relative weed \Rightarrow When other crop is grown in the field while the growing of main crop is known as relative weed.
- These crops/weeds are not sown by farmers
 - Example \rightarrow Growing of mustard, gram and pea in wheat crop.

- Q8 Characteristics of ideal jelly \Rightarrow
The prepared jelly should be attractive and have good odour
- i) Jelly should not be seen separately or in broken form
- ii) It should have taste or flavour of fruit by which it is prepared.

- Q9 Problems that hinder development of fruit preservation business -
- i) Some varieties of fruit and vegetables are not easily found
- ii) Disregard of technological resources



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

600
111
=

Higher price of preserved product and mentality of families towards it.

(1)
2

Q.10
1
=

Characteristics of 'Rathi' cow breed :-

Its skin colour is of ~~teal~~ white, brown and red spots found on it.

ii
=

Horns are short and thick and body structure is medium

iii
=

Milk production is 1200 to 1500 kg per lactation period. That is why, it is a milch breed of cow.

(1)
2

BSER-169/2021

Q.11
i
=

Place of Origin \Rightarrow Place of origin of Murrah is western Haryana (Sirs) and adjoining areas of Delhi.

Characteristic of Murrah breed of buffalo :-

ii
=

Horns are long and are in curved shape

iii
=

The colour of body is shiny black colour, that is why, it is said to be most beautiful breed of buffalo.

Q.12
i
=

National Dairy Research Institute is situated in



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

Karnal district of Haryana state.

Two hybrid breeds which are developed from National Dairy Research Institute are -

(1) Karen Freis
(2) Karen Swiss

Q13 Place of origin \Rightarrow Place of origin of Jafraabadi breed of buffalo
is Kathiyawad area and Jafraabadi area of Gujarat

Characteristics \Rightarrow

i It is heavy breed of buffalo because the weight of Jaffreabadi male is 500 to 600 kg and Jafraabadi female is 450 to 500 kg

ii Horns of Jafraabadi buffalo is straight which is in down direction, curl is present which give upward direction. Horns are associated with 'dropping horns' term

Q14 Characteristics of healthy animal :-
Normal physical, mental activities and health and physiological



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

ii
=

Normal body temperature, pulse rate and respiration rate.

(4)

iii
=

Alert and erect ears and shiny skin is present in healthy animals.

Q. 15
=

Causal Organism of foot and Mouth disease :-

Causal organism of foot and mouth disease is virus.

7 species of virus causes disease, they are :-
A, O, C, set I, set II, set III and mixed set I

BSER-16972021

i
=

Symptoms of Foot and Mouth disease :-

Due to wounds present in foot animal hobbies while moving walking and even cannot walk properly

ii
=

Ulcers are formed in mouths, by which drooling occurs.

Q. 16
=

Trench method of making Farm Yard Manure :-

Trench method of making Farm yard manure was developed by C.N. Acharya

This method is most popular and most convenient method of Farm yard manure making

In this method, trenches are made in which



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

Farm Yard Manure is prepared.

- The dimensions of this trench has length of 60 feet, width of 5 feet and depth of 1.5 feet

- Substances required for Trench method are :-
 - Dung or Slurry of Dung
 - Urine
 - Straw bedding

Method :-

- Firstly, dung is spread over the trench.
- After spreading dung, the straw bedding which are soaked in urine is used in trench and water is used to give it proper moisture for decomposition.
- This process is repeated till the trench is not filled and manure should be 1 feet above the trench and then it is covered.
- By trench method, Farm Yard manure is prepared in 3 months.
- The prepared manure is applied in crops at the rate of 10-15 tonnes per hectare and in vegetables at the rate of 20-25 tonnes per hectare.



Q. 17 Cow breeds :-

i) Haryana ⇒

Place of origin = The place of origin of Haryana breed is in Haryana state. It is found in Alwar and Bharatpur districts of Rajasthan.

Utility = The milk production this breed is 1000 to 1200 kg per lactation period. Bulls are used in farming and tillage practices.

ii) Nagori ⇒

Place of origin = Place of origin of Nagori breed is Jodhpur and Nagaur districts of Rajasthan. It is found in adjoining areas of these districts.

Utility = Milk production is 600 to 900 kg per lactation period. It is a draft purpose breed that is why bulls are used in agriculture practices.

iii) Jersey ⇒

Place of origin = The origin place of Jersey breed is said to be in Jersey island found in English channel. They are abundantly found in India and Rajasthan.



• Utility = The milk production is approximately 4000 to 4500 kg per lactation period. Its milk contains 5 to 5.5% fat. Bulls are not suitable for farming and tillage practices.

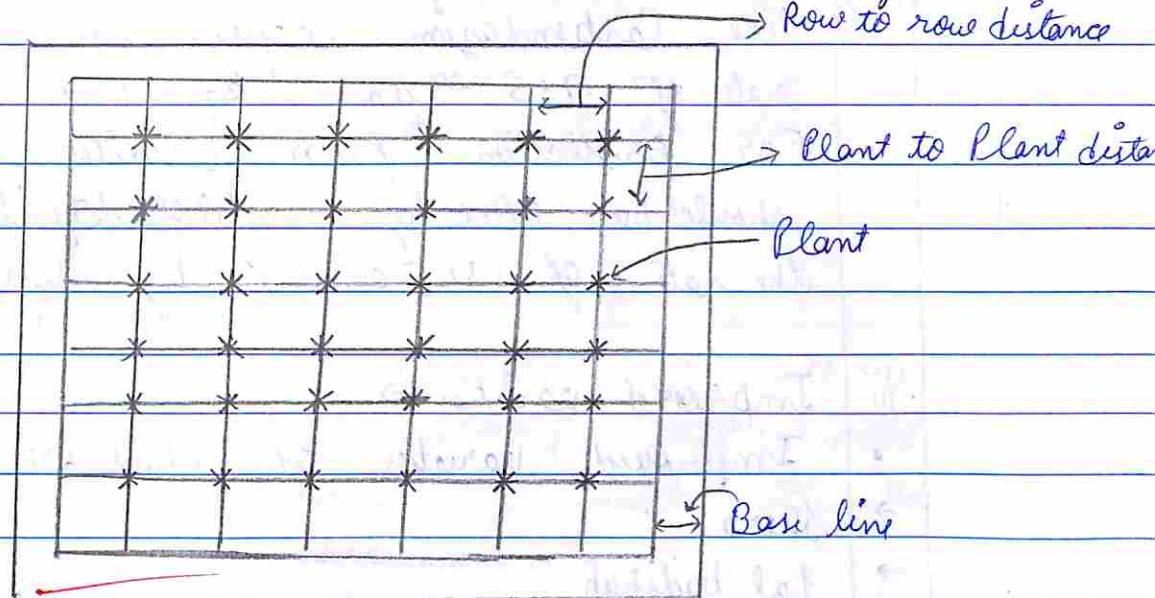
(B)

Q.18

- Square planting System for fruit orchard:- This method of planting system is most popular and easiest method used in fruit orchard.
- In this method, Row to row distance and Plant to Plant distance is kept similar and where the lines of rows and plants intersect each other, the plant is sown there and it leads to square structure. That is why, it is known as square method.
- With the help of square method good production is obtained as well as there is no hindrance in transport works in orchard. There is proper space between trees by which these works can be done.
- Examples of fruit which are planted by square planting system -
- Mango - 10×10 m
 - Ber - 8×8 m
 - Pomegranate - 5×5 m
 - Papaya - 3×3 m etc.



Diagrammatic illustration of square planting system :-



Q19 Wheat crop :-

i

Time of sowing and method \Rightarrow

- Sowing of wheat in unirrigated regions should be done from 1 October to 30 October
- Sowing of wheat in irrigated regions is done from 25 October to 10 November
- Sowing of wheat should be done in lines with Row to row distance 22.5 cm and plant to plant distance $10-11\text{ cm}$
- Depth should be taken 6 to 7 cm

ii

Seed rate and seed treatment \Rightarrow

- Seed rate of wheat in irrigated regions should be 100 kg / hectare
- Seed rate of wheat in unirrigated regions should be 125 kg / hectare



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

- Seed treatment ~~should~~ be done by fungicide like Carbendazim, septan etc. at the rate of 2.5 - 3 gm / kg seeds.
- 1 • For protection from termity, seed treatment should be done by Chloropyriphos at the rate of 450 ml / kg seeds

III Improved varieties ⇒

• Improved varieties of wheat are -

- Heera
→ Lal badshah
→ Kharchia
→ Raj 3777

IV Yield per hectare ⇒

- Yield of wheat in irrigated regions is 50-60 quintal / hectare
• Yield of wheat in unirrigated regions is nearly 15-20 quintal / hectare.

Q20

Mango :-

i Soil and Climate ⇒

- Sandy loam and loamy soil which is rich in organic matter and with pH range of 6.5 - 7.5 is suitable ~~blue~~ soil for mango cultivation.

- There should not be any hard layer present till 2 meter depth.



- Mango is fruit of tropical climate and temperature range $25 - 30^{\circ}\text{C}$ is most suitable climate for mango.
- Heavy rainfall is harmful at the time for fruiting and flowering.

ii) Plant propagation \Rightarrow

- Mango can be propagated by both seed and vegetative method. Inarching, soft wood grafting and stone grafting are some of vegetative propagation method.
- Veneer grafting is commercial method of propagation.
- In this method, small wedge cut downwards which is 30 mm in length is given and again a smaller cut is given, by which upper part is removed.
- Now upper part of other plant is taken and attached with the rootstock by tying polythene sheet on it.
- For veneer grafting plants should be 7.5 cm long.
- It is mostly used in July - August month.

iii) Four improved varieties \Rightarrow

Improved varieties of mango are :-

- \rightarrow Bombay green
- \rightarrow Kesar
- \rightarrow Chausa
- \rightarrow Neelam



iv

Planting method →

- Planting is done in July month. Layout of pit should be prepared one month before planting.
- Pit size for mango is $1 \times 1 \times 1$ m and R X P is 10×10 m but for some varieties it is different like in Amrapali it is 2.5×2.5 m and in Dasheri for density plant planting it is 1.25×1.25 metre
- pits should be filled with 25 kg FYM [Farm Yard Manure], 1 kg super phosphate and 250 gram of quanophos for killing insects.

NSER-169-2021

END



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

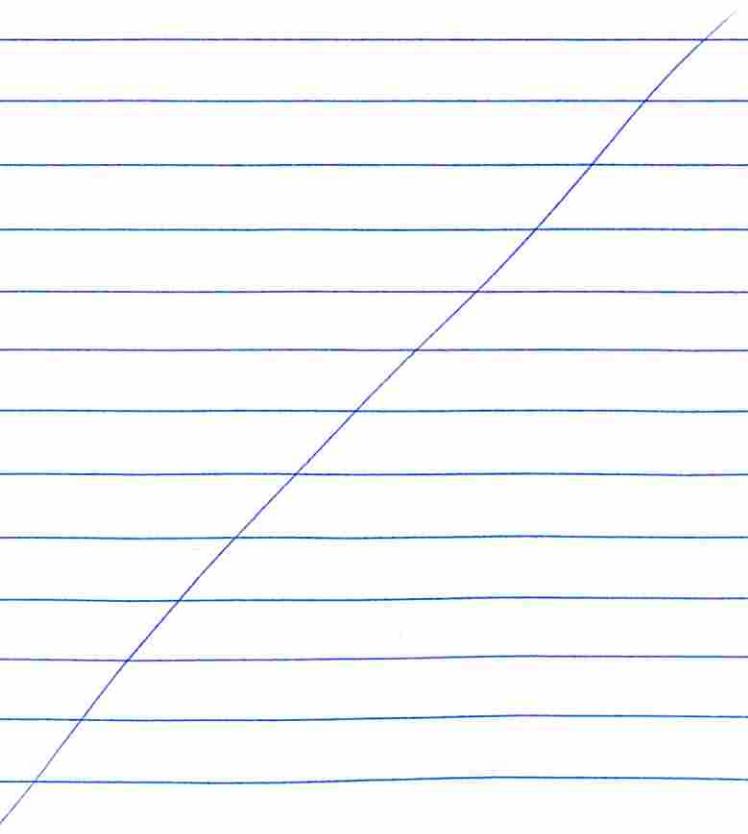


परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर



परीक्षक द्वारा प्रदत्त अंक	प्रश्न संख्या	परीक्षार्थी उत्तर
		





परीक्षक द्वारा प्रश्न
प्रदत्त अंक संख्या

परीक्षार्थी उत्तर



20



परीक्षक द्वारा
प्रदत्त अंक

परीक्षार्थी उत्तर



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

BSER-169/2021



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

परीक्षक द्वारा
प्रदत्त अंकप्रश्न
संख्या

परीक्षार्थी उत्तर



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर





परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर

परीक्षक द्वारा
प्रदत्त अंकप्रश्न
संख्या

परीक्षार्थी उत्तर



परीक्षक द्वारा
प्रदत्त अंक

प्रश्न
संख्या

परीक्षार्थी उत्तर



30

