FEDERAL PUBLIC SERVICE COMMISSION



COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT, 2013

Roll Number

AGRICULTURE

ALLOWED: (PART-I MCQs) 30 MINUTES MAXIMUM MAR (PART-II) 2 HOURS & 30 MINUTES MAXIMUM MAR (PART-II) 2 HOURS & 30 MINUTES MAXIMUM MAR (III) See the part attempt PART-I (MCQs) on separate OMR Answer Sheet which shall be take after 30 minutes. (ii) Overwriting/cutting of the options/answers will not be given credit. PART-I (MCQs) (COMPULSORY)	KS: 20
First attempt PART-I (MCQs) on separate OMR Answer Sheet which shall be take after 30 minutes. (ii) Overwriting/cutting of the options/answers will not be given credit. PART-I (MCQs) (COMPULSORY) Select the best option/answer and fill in the appropriate Circle on the OMR Answer Sheet. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Ratio of additive variance to phenotypic variance is called: a) Heritability (Broad sense) (b) Heritability (Narrow sense) (c) Co-heritability d) Gene action (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these itibosomes are the sites of: a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these itype of sugar present in DNA is: a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the remapped? a) 10 (b) 20 (c) 40 (d) 15 (e) None of these in of Urea fertilizer is: a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these in of Urea fertilizer is: a) 1000 acres irrigated and 2000 acres barani land (d) 150 acres irrigated and 1000 acres barani b) 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	KS: 80
PART-I (MCQs) (COMPULSORY) Select the best option/answer and fill in the appropriate Circle on the OMR Answer Sheet. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet. Answers given anywhere Sheet. Answers given and Sheet. Answers given and Sheet. Answers given and Sheet. Answers given and Sheet. Answers	n back
Select the best option/answer and fill in the appropriate Circle on the OMR Answer Sheet. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. (b) Heritability (Narrow sense) (c) Co-heritability (c) Co-heritability (d) Cob (e) None of these (notlinease the sites of: (e) None of these (f) Photosynthesis (g) Photosynthesis (h) Protein synthesis	
Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. Answers given anywhere, other than OMR Answer Sheet, shall not be considered. And Heritability (Broad sense) (b) Heritability (Narrow sense) (c) Co-heritability (d) Gene action (e) None of these and Spike (b) Panicle (c) Arrow (d) Cob (e) None of these and Spike (b) Panicle (c) Arrow (d) Cob (e) None of these and 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these and 3n-2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these and 3n-2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these (e) None of these (f) Protein synthesis (c) Photosynthesis (g) Photosynthesis (h) Protein synthesis (c) Photosynthesis (h) Anaerobic respiration (e) None of these (h) Protein synthesis (c) Photosynthesis (h) Protein synthesis (c) Photosynthesis (h) Anaerobic respiration (e) None of these (h) Protein synthesis (c) Photosynthesis (h) Protein synthesis (c) Photosynthesis (h) Protein synthesis (e) None of these (h) Protein synthesis (e) None of these (h) Protein synthesis (h) Protein synthesis (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2n+2 (e) None of these (h) Protein synthesis (h) 2	
Ratio of additive variance to phenotypic variance is called: a) Heritability (Broad sense) (b) Heritability (Narrow sense) (c) Co-heritability d) Gene action (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these it bosomes are the sites of: a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these it bosomes are the sites of: a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the remapped? b) 10 (b) 20 (c) 40 (d) 15 (e) None of these b) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: b) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani c) 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	(20x1 =
a) Heritability (Broad sense) (b) Heritability (Narrow sense) (c) Co-heritability d) Gene action (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these it is soones are the sites of: a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these if it is supported by the state of the second in the seco	
(a) Heritability (Broad sense) (b) Heritability (Narrow sense) (c) Co-heritability (d) Gene action (e) None of these inflorescence of wheat plant is called: (a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these A nullisomic individual is represented by: (a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these (a) Fat synthesis (b) Protein synthesis (c) Photosynthesis (d) Anaerobic respiration (e) None of these (f) Pope of sugar present in DNA is: (a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the daize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the remapped? (a) 10 (b) 20 (c) 40 (d) 15 (e) None of these (f) Of Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these (f) None of these (g) Anaerobic respiration (h) 500 acres irrigated and 1000 acres barani (h) 250 acres irrigated and 2000 acres barani land (h) 500 acres irrigated and 300 acres barani (h) 250 acres irrigated and 300 acres barani land (h) 150 acres irrigated and 300 acres barani	
d) Gene action (e) None of these inflorescence of wheat plant is called: (a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: (a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: (a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inflorescence of wheat plant is called: (a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these itibosomes are the sites of: (a) Fat synthesis (b) Protein synthesis (c) Photosynthesis (d) Anaerobic respiration (e) None of these iype of sugar present in DNA is: (a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the free mapped? (a) 10 (b) 20 (c) 40 (d) 15 (e) None of these (c) Hof Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these (c) Rome of these (c) Rome of these (d) Triose (e) None of these (e) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani (d) 150 acres irrigated and 300 acres barani (e) 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
inflorescence of wheat plant is called: (a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these in ullisomic individual is represented by: (a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these libosomes are the sites of: (a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these lype of sugar present in DNA is: (a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the remapped? (a) 10 (b) 20 (c) 40 (d) 15 (e) None of these hof Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these recording to 1972 Land Reforms the ceiling of land was: (b) 1000 acres irrigated and 2000 acres barani land (d) 150 acres irrigated and 300 acres barani land (d) 150 acres irrigated and 300 acres barani	
a) Spike (b) Panicle (c) Arrow (d) Cob (e) None of these inullisomic individual is represented by: a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these libosomes are the sites of: a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these ype of sugar present in DNA is: a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the remapped? a) 10 (b) 20 (c) 40 (d) 15 (e) None of these hof Urea fertilizer is: a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these eccording to 1972 Land Reforms the ceiling of land was: a) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani land (c) 150 acres irrigated and 300 acres barani land (d) 150 acres irrigated and 300 acres barani	
Anullisomic individual is represented by: (a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these (b) Somes are the sites of: (a) Fat synthesis (b) Protein synthesis (c) Photosynthesis (d) Anaerobic respiration (e) None of these (d) Triose (e) None of these (e) Photosynthesis (f) Photosynthesis (h) Protein synthesis (h) Protein synthesis (h) Protein synthesis (h) Photosynthesis (h) Anaerobic respiration (h) Protein synthesis (h) Protein	
a) 2n-1 (b) 2n+1 (c) 2n-2 (d) 2n+2 (e) None of these dibosomes are the sites of: a) Fat synthesis (b) Protein synthesis (c) Photosynthesis d) Anaerobic respiration (e) None of these ype of sugar present in DNA is: a) Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the emapped? a) 10 (b) 20 (c) 40 (d) 15 (e) None of these hof Urea fertilizer is: a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: b) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
ibosomes are the sites of: (b) Protein synthesis (c) Photosynthesis (d) Anaerobic respiration (e) None of these (e) None of these (f) Pentose (g) Photosynthesis (h) Protein synthesis (g) Photosynthesis (h) Anaerobic respiration (g) Photosynthesis (h) Protein synthesis (h	
Anaerobic respiration (e) None of these ype of sugar present in DNA is: (b) Hexose (c) Heptose (d) Triose (e) None of the faize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the e mapped? (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
Anaerobic respiration (e) None of these ype of sugar present in DNA is: Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the se aize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the emapped? 10 (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
Pentose (b) Hexose (c) Heptose (d) Triose (e) None of the aize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the emapped? 10 (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: 10 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these ecording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
aize has 10 pairs of chromosomes. How many linkage groups will be present in maize if all the emapped? 10 (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: 10 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
the mapped? (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these occording to 1972 Land Reforms the ceiling of land was: (b) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani land (c) 150 acres irrigated and 300 acres barani	
the mapped? (b) 20 (c) 40 (d) 15 (e) None of these of Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these occording to 1972 Land Reforms the ceiling of land was: (b) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani land (c) 150 acres irrigated and 300 acres barani	genes
th of Urea fertilizer is: (a) 4.00 (b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: (a) 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani (b) 250 acres irrigated and 500 acres barani land (c) 150 acres irrigated and 300 acres barani	
(b) 3.5 (c) 8.0 (d) 7.0 (e) None of these coording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
coording to 1972 Land Reforms the ceiling of land was: 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
 1000 acres irrigated and 2000 acres barani land (b) 500 acres irrigated and 1000 acres barani 250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani 	
250 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	
None of these 230 acres irrigated and 500 acres barani land (d) 150 acres irrigated and 300 acres barani	iland
None of these	land
Thich type of soil holds more water? Sandy (b) Stony (c) Clavey (d) Silty (e) None of these	
Sandy (b) Stony (c) Clayey (d) Silty (e) None of these ydrosphere refers to:	
7	
() Zamost authosphiere	
hich compound is mostly used in Pakistan for the reclamation of saline-sodic and Sodic soils?	
Apartite (b) Calcite (c) Dolomite (d) Gypsum (e) None of	ا مما
Apartite (b) Calcite (c) Dolomite (d) Gypsum (e) None of arrot, Radish, Cabbage and beet are:	nese
Annual (b) Biennial (c) Perenial (d) Woody perennial (e) None of the second sec	hogo

AGRICULTURE mes to 13. Which one of the following is not a fruit? (e) None of (d) Water melon (b) Potato (c) Musk melon 14. The body of a sheep is covered with specialized fibres known as: (e) None of these (a) Hairs (b) Fleece (c) Wool (d) Fuz Bovine is a term used for: 15. (e) None of these (a) Cattle (d) Goat (b) Buffalo (c) Sheep 16. The act of giving birth to young ones in animals is called: (e) None (a) Ovulation (b) Fertilization (c) Parturation (d) Conception 17. The type of mouth parts of the Grass hopper are: (a) Chewing (b) Sucking (c) Piercing and sucking (d) Biting and sponging (e) None Bacteria reproduce asexually by means of: 18. (b) Budding (c) Binary fission (d) Multiplication (e) None of t-(a) Fragmentation 19. All goods and services produced in a country in one year are called: (c) NDP (e) None of these (a) GNP (d) NNP **(b)** GDP 20. Uniform removal of soil in thin layer from sloping land is called: (a) Sheet erosion (b) Rill erosion (c) Gully erosion (d) Stream channel erosion (e) None of these PART-II NOTE: (i) Part-II is to be attempted on the separate Answer Book. (ii) Candidate must write Q. No. in the Answer Book in accordance with Q. No. in the Q. Pa (iii) Attempt ONLY FOUR questions from PART-II. ALL questions carry EQUAL marks. (iv) Extra attempt of any question or any part of the attempted question will not be considered What are the sources of irrigation water in Pakistan? Explain different methods of O. No.2. irrigation to agricultural crops. Write a detailed note on the prospects of Farm Mechanization in Pakistan. Q. No.3. Explain the process of Biological Nitrogen Fixation. Discuss the factors which affect Q. No.4. this process. What is Hybrid Vigour? Explain the procedure of developing a hybrid corn. Q. No.5. Explain the process of Protein synthesis in the plant cell. Q. No.6. What are the major insects, pests and diseases of Cotton crop in Pakistan? Suggest and

explain an economical strategy to be adopted by the farmers to minimise the losses due

Live Stock as an important component of Agriculture in Pakistan.

(5

Q. No.7.

Q. No.8.

to these menaces.

(i)

(ii) (iii)

(iv)

(v) (vi)

Write short notes on any **FOUR** of the following:

Agro-forestry.

Land Tenure System in Pakistan.

Status of Horticulture in Pakistan.

Role of Organic Matter in the soil.

Water logging and Salinity in Pakistan.