

Question Booklet No.

(To be filled up by the candidate by blue/black ball-point pen)

Roll No.

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Roll No. (Write the digits in words)

Serial No. of OMR Answer Sheet

Day and Date

(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

1. Within 30 minutes of the issue of the Question Booklet, Please ensure that you have got the correct booklet and it contains all the pages in correct sequence and no page/question is missing. In case of faulty Question Booklet, bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall *except the Admit Card without its envelope.*
3. *A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided.*
4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
5. *On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.*
6. *No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and Roll No. and OMR Sheet No. on the Question Booklet.*
7. *Any changes in the aforesaid-entries is to be verified by the invigilator, otherwise it will be taken as unfair means.*
8. *This Booklet contains 40 multiple choice questions followed by 10 short answer questions. For each MCQ, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet. For answering any five short Answer Questions use five Blank pages attached at the end of this Question Booklet.*
9. For each question, darken only *one* circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. *Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).*
11. For rough work, use the inner back pages of the title cover and the blank page at the end of this Booklet.
12. Deposit *both OMR Answer Sheet and Question Booklet* at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

[उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गये हैं ।]

Total No. of Printed Pages : 16

SEAL

Research Entrance Test – 2018

No. of Questions : 50

Time : 2 Hours

Full Marks : 200

Note : (i) This Question Booklet contains 40 Multiple Choice Questions followed by 10 Short Answer Questions.

(ii) Attempt as many MCQs as you can. Each MCQ carries 3 (Three) marks. 1 (One) mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question. If more than one alternative answers of MCQs seem to be approximate to the correct answer, choose the closest one.

(iii) Answer only 5 Short Answer Questions. Each question carries 16 (Sixteen) marks and should be answered in 150-200 words. Blank 5 (Five) pages attached with this booklet shall only be used for the purpose. Answer each question on separate page, after writing Question No.

1. Which of the following is referred as Buffalo grass ?
(1) Para grass (2) Napier grass (3) Setaria grass (4) Guinea grass
2. Who is known as "Father of White Revolution in India" ?
(1) Dr. M. S. Swaminathan (2) Dr. J. J. Chinoy
(3) Dr. R. S. Paroda (4) Dr. Verghese Kurien
3. A character which is expressed in hybrid is called :
(1) Epistatic (2) Co-dominant (3) Dominant (4) Recessive
4. First antibiotic isolated was :
(1) Neomycin (2) Streptomycin (3) Terramycin (4) Penicillin
5. Mycorrhiza is the :
(1) Parasitic association between fungus and roots of seed plants
(2) Symbiotic association between fungus and roots of seed plants
(3) Saprophytic association between fungus and roots of seed plants
(4) Symbiotic association between bacteria and the roots of seed plants
6. Growing of complete plant from a cell is known as :
(1) Totipotency (2) Axenic culture
(3) Clone formation (4) Micro propagation
7. Clay soil particle size is :
(1) Less than 0.002 mm (2) Between 0.002-0.02 mm
(3) Between 0.02-0.2 mm (4) More than 2 mm
8. Which bacteria is useful for "Dairy Industry" ?
(1) *Clostridium acetobutyricum* (2) *Bacillus megatherium*
(3) *Acetobacteria aceti* (4) *Bacterium acidi lactic*
9. The silkworm *Bombyx mori* is fed on :
(1) Rose leaves (2) Mulberry leaves
(3) Hibiscus leaves (4) Gladiolus leaves
10. Sansad Adarsh Gram Yojana (SAANJHI) was launched on :
(1) November, 2005 (2) January, 2010
(3) October, 2014 (4) March, 2017

11. Which of the following crops has maximum water productivity ?
- (1) Soybean (2) Sunflower
(3) Cotton (4) Rapeseed and mustard
12. Tensiometer is most useful for irrigation scheduling in :
- (1) Clay soil (2) Sandy loam soil
(3) Sandy soil (4) Clay loam soil
13. In surface irrigation method relationship between distance travelled by a flow of water and unit of time is called :
- (1) Soil moisture curve (2) Advance curve
(3) Capillary curve (4) Dynamic curve
14. Irrigation efficiency (%) of a system when 20% water is lost in distribution, 10% in the field channels and 25% during application is :
- (1) 45 (2) 54 (3) 58 (4) 48
15. Time required for irrigating 7 acres of wheat when moisture deficit is 2.5", discharge from weir is 2 Cusecs and the irrigation efficiency is 70%.
- (1) 12.5 hrs (2) 10 hrs (3) 6.25 hrs (4) 18.5 hrs
16. Which of the following pulse crops require maximum application of nitrogen ?
- (1) Pigeon pea (2) Gram
(3) Rajmash (4) Lentil
17. System of grass-legume mixture for short term (2 to 5 years) to improve soil fertility and yield of arable crops is known as :
- (1) Conservation agriculture (2) Alley cropping
(3) Silvipastoral (4) Ley farming
18. Criss cross row planting pattern enhances weed control and yield of :
- (1) Wheat (2) Gram
(3) Maize (4) Mustard

19. Aim of bushening in rainfed rice is :
- (1) Weed control
 - (2) Creating semi puddled condition
 - (3) Reorientation of plants
 - (4) Weed control and creating semi-puddled condition
20. Which one of the following statements is wrong for organic farming ?
- (1) Maintenance of long term fertility.
 - (2) Emphasis on the use of on farm inputs.
 - (3) Use of non chemical methods
 - (4) Emphasis on maximum production
21. In drylands, the effective cropping season required to grow double crop is :
- (1) Less than 10 weeks
 - (2) 10 to 20 weeks
 - (3) 20 to 30 weeks
 - (4) More than 30 weeks
22. Which portion of sugarcane is best for planting :
- (1) Top 1/3rd portion
 - (2) Lower 1/3rd portion
 - (3) Top 2/3rd portion
 - (4) Central portion
23. Which of the following oilseed crops has maximum Linoleic acid content ?
- (1) Sunflower
 - (2) Safflower
 - (3) Soybean
 - (4) Sesamum
24. The unit of integrated farming system is :
- (1) Income/unit area
 - (2) Production/unit area
 - (3) Components in the system
 - (4) Farm household
25. H_2PO_4^- and HPO_4^{2-} ions in soil are equally distributed at pH :
- (1) 6.8
 - (2) 7.0
 - (3) 7.2
 - (4) 7.4