

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 आबरण-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. The food additives which help to lower the acidity and increase the pH of foods are called :
- (1) Acidulants (2) BHA
(3) TBHQ (4) Anthocyanism
12. Proteolytic enzyme are able to tenderize meat because :
- (1) These enzyme work at low temperature
(2) These enzyme do not take very long for catalyzing this reaction
(3) These enzyme can catalyze the hydrolysis of the peptide bonds
(4) The meat get softened after keeping it as such for some time
13. Maxiren is a :
- (1) Ripening agent (2) Coagulating agent
(3) Cryoprotective agent (4) Catalytic agent
14. Reconstituted milk is made by :
- (1) Mixing butter with milk
(2) Mixing whole milk powder in water
(3) Mixing skim milk powder in water
(4) Mixing skim milk powder with fresh milk
15. Name of antifoaming agent to prevent bloat :
- (1) Bloat guard (2) Poloxalene
(3) Mimosine (4) Lecithin
16. Precursor of Vit D₂ is in yeast :
- (1) Ergosterol (2) Cholecalciferol
(3) Cholesterol (4) Phytosterol
17. What is the state of protein in milk ?
- (1) Colloidal (2) Globules
(3) Serum phase (4) Emulsion

18. Colostrum coagulates on heating because :
- (1) It contain more fat
 - (2) It contain less lactose
 - (3) It contain more albumin and globulin
 - (4) It contain less fat
19. is the main product of glycerol fermentation :
- (1) UFA
 - (2) Propionic acid
 - (3) Carboxyl
 - (4) Ketones
20. Microbial rennet is mainly prepared from :
- (1) A. fumigates
 - (2) B. Subtilis
 - (3) B. Stearother mophilus
 - (4) A. niger
21. The property of water made use in the freeze drying preparation of food is :
- (1) Super cooling
 - (2) Heat sublimation
 - (3) Hydrophobic bonding
 - (4) Sorption isotherms
22. Source of micro-organism for alpha anylase production is :
- (1) Bacillus
 - (2) Aspergillus
 - (3) Escherichia
 - (4) Streptomyces
23. method for culture preservation is also known as rapid drying in frozen state :
- (1) Agar slant culture
 - (2) Storing at very high temperature
 - (3) Lyophilization
 - (4) Agar slant culture covered with ril
24. In dairy industry which enzyme is used for the controlled hydrolysis of milk fat to produce lipolysed milk fat :
- (1) Lipase
 - (2) Lipoxygenase
 - (3) Peroxidage
 - (4) Lipoxydase
25. Manufacture of soft centre candies and confectionary which enzyme is important.
- (1) Sucrose
 - (2) Papain
 - (3) Pectinase
 - (4) Amylase

26. Ropiness in bread is caused due to :
- (1) *Bacillus subtilis* (2) *S. Cerevisiae*
(3) *A. niger* (4) *Fusarium spp.*
27. Which of the following enzyme used for debittering of fruit juice ?
- (1) Ficin (2) Naringinase (3) Pepsin (4) Papain
28. Which variety of *saccharomyces cervisiae* is used in beer making ?
- (1) *Mesentricus* (2) *Ellipsodeus* (3) *Vermiformis* (4) *Carlsbergensis*
29. Sodium nitrite is used in curing of meat to improve :
- (1) Colour (2) Flavour (3) Texture (4) Taste
30. Radiation source used for commercial food processing is
- (1) Hydrogen-3 (2) Cobalt-60
(3) Phosphorus-32 (4) Sodium-24
31. The E-tongue taste evaluation is performed by :
- (1) Liquid sensor (2) Gas sensor
(3) Both (1) & (2) (4) Solid sensor
32. Tomato ketchup is good example of :
- (1) Newtonian fluid (2) Non Newtonian fluid
(3) Pseudoplastic (4) Both (1) & (2)
33. Agarobiose is :
- (1) Monosaccharide (2) Disaccharide
(3) Trisaccharide (4) Polysaccharide
34. Koettstorfer number is the measure of :
- (1) Moisture content of grains
(2) Viscosity of dough
(3) Average molecular weight of fatty acids
(4) Temperature sensitivity of enzyme

35. Process lethality at a specified temperature is a multiple of the :
- (1) Initial concentration of microbes
 - (2) Final concentration microbes
 - (3) Z value
 - (4) Decimal reduction time
36. Sourkraut is the :
- (1) Fermented raddish
 - (2) Fermented carrot
 - (3) Fermented cabbage
 - (4) Fermented spinach
37. ISO standard are :
- (1) Mandatory order
 - (2) Mandatory regulation
 - (3) Non mandatory regulation
 - (4) Non mandatory order
38. FSSAI is governed by the :
- (1) Ministry of Food Processing & Industries
 - (2) Ministry of Health and Family Welfare
 - (3) Ministry of Agriculture & Farmers Welfare
 - (4) Ministry of Parliamentary Affairs
39. Which of the following containers should not be used in microwave ovens ?
- | | |
|------------|---------------|
| (1) Glass | (2) Chinaware |
| (3) Silver | (4) Plastic |
40. Pungency factor present in Chilli is :
- | | |
|----------------|--------------|
| (1) Capsorubin | (2) Capsacin |
| (3) Capsathin | (4) Capsine |