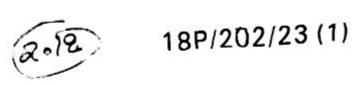
| Set No. 1 | 18P/202/23 |
|------------------------------------|---|
| Total No. of Printed Pages: 23 | Question Booklet No |
| (To be filled t | up by the candidate by blue/black ball-point pen) |
| Roll No. | |
| Roll No. (Write the digits in word | (s) 2018 |
| Serial No. of OMR Answer Shee | |
| Centre Code No. | |
| 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)

- Within 30 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it
 contains all the pages in correct sequence and that no page/question is missing. In case of faulty
 Question Booklet bring it to the notice of the Super ntendent/Invignators immediately to obtain a fresh
 Question Booklet.
- 2. Do not bring any loose parer, written or blank inside the Examination Hall except the Admit Card.
- 3. A separate OMR Answer Sheet is given. I should not be folded or mutilated. A second OMR Answer Sheet shall not be provided. On the VMR Answer Sheet will be evaluated.
- 4. Write all entries by blue black pen in the care provided above.
- On the front page of the OMR Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, write the Question Booklet Number, Centre Sode Number and the Set Number wherever applicable in appropriate places.
- 6. No overwriting is allowed in the entries of Roll No. Question Booklet No. and Set No. (if any) on OMR Answer sheet and Roll No. and OMR Answer sheet no. on the Question Booklet.
- Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
- 8. Each question in this Booklet is followed by four alternative answers. For each question, 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 OMR Answer Sheet.
- For each question, darken only one circle on the OMR 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 mark).
- 11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
- 12. On completion of the Test, the candidate must handover the OMR Answer Sheet to the Invigilator in the examination room/hall. However, candidates are allowed to take away Test Booklet and copy of OMR Answer Sheet with them.
- 13. Candidates 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.

ROUGH WORK रफ़ कार्य



No. of Questions: 120

| Time : 2 H | ours] | [Full Marks: 360 |
|------------|---|---|
| Note : (1) | Attempt as many questions as you marks. One mark will be de Zero mark will be awarded for e | ou can. Each question carries 3 (Three) educted for each incorrect answer each unattempted question. Inswers seem to be approximate to the |
| (2) | correct answer, choose the close | sest one. |
| 1. Onio | n production is related to ——. | |
| | Silver revolution | (2) Pink revolution |
| (3) | Blue revolution | (4) Golden revolution |
| 2. Weed | l index indicates ——. | |
| (1) | Herbicide efficiency | (2) Yield reduction |
| (3) | Herbicide activity | (4) Herbicide toxicity |
| 3. Rice | e plants prefer absorption of N for | ertilizer in form of ——. |
| (1) | NO ₃ (2) NO ₂ | (3) NH_4 (4) NH_2 |
| 4. The | term 'soilage' includes | |
| (1) | Hay | (2) Silage |
| (3) | Concentrate | (4) Green fodder |
| | | |

| 5. | The | only metallic | eleme | ent present in | chlore | ophyll is — | 5 1 |
|-----|-------------|--------------------------------------|---------------|------------------|----------|-------------------------|---|
| | (1) | N | (2) | Mg | (3) | K | (4) Ca |
| 6. | The | net assimilati | on rate | e is expressed | l in tei | ms of ——. | |
| | (1) | g cm ⁻² day ⁻¹ | (2) | $gg^{-1}ha^{-1}$ | (3) | g g ⁻¹ day-1 | (4) g cm ⁻² ha ⁻¹ |
| 7. | Nitr hum | rate levels in d nan health hazar | rinkin rd. | g water abov | e | mg per litre | are considered as a |
| | (1) | 5 | (2) | 10 | (3) | 15 | (4) 20 |
| 8. | Mus | tard crop plan | ted at | a spacing of 5 | 0×20 | cm will have | plants/ha. |
| | (1) | 75,000 | (2) | 1,00,000 | (3) | 1,25,000 | (4) 1,50,000 |
| 9. | Whi | ch of the follow | ving i | s a method of | indire | ect measureme | nt of soil moisture? |
| | (1) | Neutron mois | ture n | neter | (2) | Electron mois | ture meter |
| | (3) | Positron mois | ture n | neter | (4) | Proton moistu | re meter |
| 10. | The | irrigation requ | ireme | nt (IR) is equa | al to – | . | |
| | (1) | WR - (ER - 5 | S) | | (2) | WR - (ER + S | 5) |
| | (3) | WR + (ER - 5 | S) | | (4) | WR + (ER + S |) |
| | | | | | | | |

| 11. | The law of diminishing return was | s proposed by ———. |
|-----|--|--|
| | (1) Mitscherlich | (2) Wilcox |
| | (3) Blackman | (4) Van Liebig |
| 12. | A cropping system where the land the harvest of standing crop is term | is handed over the succeeding crop before ned as |
| | (1) Ratoon cropping | (2) Relay cropping |
| | (3) Sequence cropping | (4) Intercropping |
| 13. | Byproduct after cream separation | n process is |
| | (1) Whey | (2) Butter milk |
| | (3) Lassi | (4) Skim milk |
| 14. | Lowest fat is found in the milk of | f |
| | (1) Jersey | (2) Sahiwal |
| | (3) Holstein Fresian | (4) Red Sindhi |
| 15. | Protein in milk is called | |
| | (1) Zein | (2) Keratin |
| | (3) Casein | (4) Collagen |
| | | |

| 16. | Specific gravity of milk on addition of water | | | | |
|-----|---|--|-------|----------|--|
| | (1) | Increases | | | |
| | (2) | Decreases | | | |
| | (3) | Remains unchanged | | | |
| | (4) | Sometime decreases sometime in | ncrea | ses | |
| 17. | Ori | igin of Sahiwal breed of cow is from | m | | |
| | (1) | India | (2) | Pakistan | |
| | (3) | Sri Lanka | (4) | Vietnam | |
| 18. | Ch | ief carbohydrate in milk is called | | | |
| | (1) | Glucose | (2) | Lactose | |
| | (3) | Maltose | (4) | Sucrose | |
| 19. | Colo | ostrum is | | | |
| | (1) | First milk drawn after parturition | | | |
| | (2) | Milk of first parturition | | | |
| | (3) | 3) Milk after two weeks of parturition | | | |
| | (4) | Only Buffaloes milk | | | |
| | | | | | |

| 20. | Temperature for h | nomogenisation of | milk | |
|-----|---------------------|----------------------|---------------------------|-------------|
| | (1) 30 °C for 30 | minutes | | |
| | (2) 65 °C for 30 | minutes | | |
| | (3) 90 °C for 30 | minutes | | |
| | (4) 110 °C for 3 | 0 minutes | | |
| 21. | Iron in milk is | | | |
| | (1) Rich | | (2) Poor | |
| | (3) Balanced | | (4) Absent | |
| 22. | Iodine is used in r | nilk for detecting a | dulteration for | |
| | (1) Water | | (2) Starch | |
| | (3) Cow's milk in | n Buffalo's milk | (4) Plant fat | |
| 23. | In artificial insem | ination | | |
| | (1) Embryo is tra | ansferred | (2) Ovum is transferre | d |
| | (3) Semen is har | vested | (4) In vitro fertilisatio | n |
| 24. | Milk of cow is y | ellowish due to | | |
| | (1) Vitamin A | | (2) Xanthene | |
| | (3) Natural pigm | ent | (4) Carotene | |
| | | (5 |) | (Turn Over) |

| . Which of the following is a Poverty Alleviation Programme? | | | | | | | |
|--|--|---|---|---|---|---|--|
| (1) | PMGSY | (2) | DPAP | (3 |) | CAPART | (4) NREGP |
| | | | | bility | of | creating inn | novation of any kind |
| (1) | Ultrapreneur | | | (2 | 2) | Intrapreneur | |
| (3) | Entrepreneur | | | (4 | 1) | Pseudoprene | eur |
| Cor | mmunication | involv | es three ph | ases, e | xţ | oression, inte | rpretation and |
| (1) | Reception | | | (| 2) | Response | |
| (3) | Transmission | 1 | | (| 4) | Reselection | î |
| Acc | cording to Bar | nard, | a leader per | rforms | th | e following t | functions |
| (1) | Determinati | on of | objectives | | | | |
| (2) Manipulation of means | | | | | | | |
| (3) | Control of in | nstrun | nentality of | action | 1 | | |
| (4) | All of the ab | ove | | | | | |
| Th | e reinforceme | ent of | an innovati | on dec | is | ion making o | occurs at |
| (1) | Decision sta | ige | | (| (2) | Knowledge | stage |
| (3) | Persuasion s | stage | | (| (4) |) Confirmati | on stage |
| | (1) Indiffrom (1) (3) Con (1) (3) Acc (1) (2) (3) (4) Th (1) | (1) PMGSY Individual who ta from within the organism (1) Ultrapreneur (3) Entrepreneur Communication (1) Reception (1) Reception (3) Transmission According to Bar (1) Determination (2) Manipulation (3) Control of in (4) All of the above the reinforcement (1) Decision states | (1) PMGSY (2) Individual who takes the from within the organization (1) Ultrapreneur (3) Entrepreneur Communication involve (1) Reception (3) Transmission According to Barnard, (1) Determination of (2) Manipulation of (3) Control of instrum (4) All of the above | (1) PMGSY (2) DPAP Individual who takes the responsification within the organization (1) Ultrapreneur (3) Entrepreneur Communication involves three ph (1) Reception (3) Transmission According to Barnard, a leader per (1) Determination of objectives (2) Manipulation of means (3) Control of instrumentality of (4) All of the above The reinforcement of an innovation (1) Decision stage | (1) PMGSY (2) DPAP (3) Individual who takes the responsibility from within the organization (1) Ultrapreneur (2) (3) Entrepreneur (4) Communication involves three phases, et (1) Reception (5) (3) Transmission (6) According to Barnard, a leader performs (1) Determination of objectives (2) Manipulation of means (3) Control of instrumentality of action (4) All of the above The reinforcement of an innovation decording to Barnard (1) Decision stage (1) | (1) PMGSY (2) DPAP (3) Individual who takes the responsibility of from within the organization (1) Ultrapreneur (2) (3) Entrepreneur (4) Communication involves three phases, exp (1) Reception (2) (3) Transmission (4) According to Barnard, a leader performs the (1) Determination of objectives (2) Manipulation of means (3) Control of instrumentality of action (4) All of the above The reinforcement of an innovation decise (1) Decision stage (2) | (1) PMGSY (2) DPAP (3) CAPART Individual who takes the responsibility of creating inner from within the organization (1) Ultrapreneur (2) Intrapreneur (3) Entrepreneur (4) Pseudoprene Communication involves three phases, expression, intee (1) Reception (2) Response (3) Transmission (4) Reselection According to Barnard, a leader performs the following to the communication of objectives (2) Manipulation of means (3) Control of instrumentality of action (4) All of the above The reinforcement of an innovation decision making of the control of the c |

(Turn Over)

| 30 | . Inr | ovators have a salient feature associated with them. It is | | | | | |
|-----|-------|--|-----------------|---|--|--|--|
| | (1) | Respectable | (2) | Venturesome | | | |
| | (3) | Deliberate | (4) | Skeptical | | | |
| 31 | . Ad | opter category is based on | | | | | |
| | (1) | Education | (2) | Innovation | | | |
| | (3) | Innovativeness | (4) | Awareness | | | |
| 32. | A fa | armer can become an entrepreneur | by | | | | |
| | (1) | Adopting a new technology | | | | | |
| | (2) | By considering his farm as busin | ess o | peration | | | |
| | (3) | Learning new method of agriculture | | | | | |
| | (4) | Developing a new practice | | | | | |
| 33. | A s | social process through cultural dif | feren ire is | ce between two or more societies called | | | |
| | (1) | Assimilation | (2) | Accommodation | | | |
| | (3) | Sanskritisation | (4) | Diffusion | | | |
| 34. | Con | nmunication is | | | | | |
| | (1) | Telling something | | | | | |
| | (2) | Verbal process | | | | | |
| | (3) | Non verbal process | | | | | |
| | (4) | Both verbal and non verbal proces | s | | | | |
| | | (7) | | (Turn Over) | | | |

| 35. | ——is an idea, practice or object that other unit of adoption. | is perceived as new by an individual or |
|-----|---|---|
| | (1) Communication | (2) Diffusion |
| | (3) Innovation | (4) Invention |
| 36. | The persons who leave the ventures as | soon as venture is created. |
| | (1) Mobile entrepreneurs | (2) Managerial entrepreneurs |
| | (3) Intonative entrepreneurs | (4) Empire builders |
| 37. | The unconsolidated debris overlying the | ne hard, unweathered bedrock is called as |
| | (1) Lithosphere | (2) Pedosphere |
| | (3) Regolith | (4) Stratosphere |
| 38. | . The comprehensive system of soil cla | assification is popularly known as |
| | (1) 8th Approximation | (2) 7th Approximation |
| | (3) 9th Approximation | (4) 10th Approximation |
| 39 | . The highest category of soil nomeno | lature is called as |
| | (1) Great group | (2) Order |
| | (3) Family | (4) Series |

| ١. | Whi | ch soil type cov | er the | maximum | area in | India? | | |
|----|---|--------------------|---------|--------------|-----------|----------------|-------------------|--------|
| | (1) | Red soil | | | (2) | Alluvial soil | | |
| | (3) | Black soil | | | (4) | Laterite soil | | |
| ι. | Wh | ich type of clay | miner | als is dom | inantly p | oresent in Ver | rtisols? | |
| | (1) | Smectite | | | (2) | Kaolinite | | |
| | (3) | Halloysite | | | (4) | Illite | | |
| 2. | 2. Which of the following is an example of 1:1 type clay mineral? | | | | | | | |
| | (1) | Vermicullite | | | (2) | Kaolinite | | |
| | (3) | Talc | | | (4) | Montmorill | onite | |
| 3. | The | e essentiality cri | teria c | of nutrients | s was giv | en by | | |
| | (1) | Amon and Sto | ut | | (2) | Barber | | |
| | (3) | Cate and Nels | on | | (4) | Schoefield | | |
| 4. | Lu | xury consumption | on is o | bserved in | which o | of the followi | ng nutrients | |
| | (1) | K | (2) | P | (3) | N | (4) S | |
| 5. | | nich of the follo | | is the alg | al symb | iont of Azol | la responsible fo | r bio- |
| | (1) | Rhizobium | | | (2) | Anabaena | | |
| | (3) | Azotobacter | | | (4) | Azospirillu | m | |
| | | | | | (9) | | (Turn | Over) |

| 57. | Bhindi yellow vein clearing disease is transmitted by | | | | | |
|-----|---|---|--|--|--|--|
| | (1) Aphis gossypii | (2) Oligonychus indicus | | | | |
| | (3) Bemisia tabaci | (4) Amrasca devastans | | | | |
| 58. | Dense webbing of rice grain in storage | e results due to | | | | |
| | (1) Angoumois grain moth | (2) Rice moth | | | | |
| | (3) Rice weevil | (4) Red flour beetle | | | | |
| 59. | Bee's wax contains | | | | | |
| | (1) Hydroxy methyl furfural | (2) Myrisyl palmitate | | | | |
| | (3) <i>n</i> -acetyl glucose amine | (4) Lauryl acetate | | | | |
| 60. | Epiricania melanoleuca, an ectoparasi | itoid is effective against | | | | |
| | (1) Sugarcane mealybug | (2) Sugarcane Pyrilla | | | | |
| | (3) Sugarcane whitefly | (4) Sugarcane scale | | | | |
| 61. | In which method of planting maximum accommodated | n number of plants per unit area can be | | | | |
| | (1) Square | (2) Rectangular | | | | |
| | (3) Hexagonal | (4) Quincunx | | | | |
| | | | | | | |

| 46. | A se | oil is low in av | ailable | Nifthe | e soil o | organ | ie carbon is in | the range of |
|-----|-------|------------------|---------|-----------|----------|-------|-----------------|--------------|
| | (1) | < 0.5% | (2) | < 0.75 | % | (3) | 0.5-0.75% | (4) < 1% |
| 47. | In U | Jrea N is presen | nt in w | hich for | rm ? | | | |
| | (1) | Ammonium | | | | (2) | Nitrate | |
| | (3) | Amide | | | | (4) | Nitrite | |
| 48. | The | critical level o | f nutri | ent con | cept w | as gi | ven by | |
| | (1) | Olsen | | | | (2) | Cate and Nels | on |
| | (3) | Brady | | | | (4) | Darcy | |
| 49. | Two | pairs of anten | nae ar | e presen | t in | | | |
| | (1) | Insecta | | | | (2) | Crustacea | |
| | (3) | Arachnida | | | | (4) | Myriapoda | |
| 50. | Nur | nber of segmer | nts pre | sent in i | nsect | head | is | |
| | (1) | Two | (2) | Four | | (3) | Six | (4) Seven |
| 51. | 'Silv | er shoot' in ric | e prod | uced by | gall r | nidge | is a modificat | ion of |
| | (1) | Leaf sheath | | | | (2) | Leaftip | |
| | (3) | Stem | | | | (4) | Leaf base | 19 |

| 52. | Eggs of mango mealy bug are laid in | | | | | |
|-----|---|---------------------------------------|--|--|--|--|
| | (1) Leaf | (2) Tree trunk | | | | |
| | (3) Crevices | (4) Soil | | | | |
| 53. | The non-chitinous layer of insect integ | ument is | | | | |
| | (1) Endocuticle | (2) Exocuticle | | | | |
| | (3) Epicuticle | (4) Epidermis | | | | |
| 54. | In cyclorrhapous dipterans, the fusion of carpora cardiaca, carpora allate and prothoracic glands is referred to as | | | | | |
| | (1) Craber's organ | (2) Simpher's organ | | | | |
| | (3) Weismann's ring | (4) Gyroscopic organ | | | | |
| 55. | Vasiform orifice is a characteristic fea | ture of | | | | |
| | (1) Delphacidae | (2) Aleyrodidae | | | | |
| | (3) Cercopidae | (4) Membracidae | | | | |
| 56. | Universal antidote is the mixture of active ratio of | tivated charcoal: tannic acid: MgO in | | | | |
| | (1) 2:1:1 (2) 1:2:1 | (3) 1:1:2 (4) 1:1.5:2 | | | | |
| | | | | | | |

| 62. | Man | go variety whic | ch is su | uitable for hig | h den | sity planting | |
|-----|-------|------------------|----------|-----------------|--------|------------------|----------------------|
| | (1) | Ratna | | | (2) | Dashehri | |
| | (3) | I.angra | | | (4) | Amrapalli | |
| 63. | Jelly | in which fruit | peels | remain susper | nded | is called as | |
| | (1) | Jam | | | (2) | Cordial | |
| | (3) | Marmalade | | | (4) | Candy | |
| 64. | Butt | oning is the pr | oblem | in which of th | ne fol | lowing crops | |
| | (1) | Okra | | | (2) | Cauliflower | |
| | (3) | Melon | | | (4) | Chillies | |
| 65. | Mos | | ethod | of irrigation | in or | chard under w | ater scarcity condi- |
| | (1) | Sprinkler syst | tem | | (2) | Drip system | |
| | (3) | Ring system | | | (4) | Flooding syste | em |
| 66. | Wir | nter Banana is a | varie | ty of | | 156 | |
| | (1) | Apple | (2) | Mango | (3) | Banana | (4) Pear |
| 67. | Wh | ere does India | rank i | n production o | of fru | its in the world | ? |
| | (1) | First | (2) | Second | (3) | Third | (4) Fourth |
| | | | | (13 | , | | (Turn Over) |
| | | | | (13 | 1 | | |

| 68. | Which one of the following is quickest method of establishing a lawn? | | | | | | |
|-----|---|--------------------------------|--|--|--|--|--|
| | (1) Dibbling | (2) Seeding | | | | | |
| | (3) Turfing | (4) Turf plastering | | | | | |
| 69. | Edible part of Knol-Khol is | | | | | | |
| | (1) Stem | (2) Root | | | | | |
| | (3) Leaf | (4) Flower | | | | | |
| 70. | Fruit of Papaya is botanically know | n as | | | | | |
| | (1) Pome | (2) Drupe | | | | | |
| | (3) Hesperidium | (4) Berry | | | | | |
| 71. | In Aonla, intervarietal plantation is | done due to | | | | | |
| | (1) Shy bearing nature of Aonla | (2) Presence of male sterility | | | | | |
| | (3) Self incompatibility | (4) Cross incompatibility | | | | | |
| 72. | 'Black heart' is a physiological diso | rder of | | | | | |
| | (1) Tomato | (2) Chili | | | | | |
| | (3) Cabbage | (4) Potato | | | | | |
| 73. | Tungro disease of rice is caused by | | | | | | |
| | (1) Bacteria | (2) Actinomycetes | | | | | |
| | (3) Algae | (4) Virus | | | | | |
| | | | | | | | |

(14)

(Continued)

| 74. | But | ton mushroom belongs to the genus | 3 | |
|-----|-----|-------------------------------------|------|------------------------------|
| | (1) | Volvariella | (2) | Agaricus |
| | (3) | Amanita | (4) | Pleurotus |
| 75. | Mer | ristem tip culture is followed for | | |
| | (1) | Elimination of bacteria | (2) | Elimination of fungi |
| | (3) | Elimination of virus | (4) | Elimination of nematodes |
| 76. | Wh | ich of the following disease occurs | due | to deficiency of zinc? |
| | (1) | Pansukh disease | (2) | Bunt of rice |
| | (3) | Khaira disease of rice | (4) | Blast disease of rice |
| 77. | Pov | vdery Mildew of fungi belongs to o | rder | |
| | (1) | Perenosporales | (2) | Erisiphales |
| | (3) | Mucorales | (4) | Uredinales |
| 78. | Cus | ecuta sp. is a | | |
| | (1) | Total root parasite | (2) | Partial root parasite |
| | (3) | Total stem parasite | (4) | Partial stem parasite |
| 79. | Wh | ich disease was responsible for the | Grea | at Bengal Famine in 1942-43? |
| | (1) | Late Blight of Potato | (2) | Rice Blast |
| | (3) | Brown Spot of Rice | (4) | Wheat Rust |
| | | | | |

| 80. | Genetic material in tobacco mosaic Virus is | | | | | |
|-----|---|-------------------------------------|--|--|--|--|
| | (1) DNA | (2) DNA or RNA | | | | |
| | (3) RNA | (4) DNA and RNA both | | | | |
| 81. | Scientist who discovered Transduction | in bacteria | | | | |
| | (1) Zinder and Lederberg | (2) Lederberg and Tatum | | | | |
| | (3) Leeuwenhoek | (4) Louis Pasteur and Nicholas | | | | |
| 82. | Casein is obtained from | | | | | |
| | (1) Milk (2) Wheat | (3) Barley (4) Maize | | | | |
| 83. | Late Blight of Potato is caused by | | | | | |
| | (1) Alternaria solani | (2) Phytophthora infestans | | | | |
| | (3) Fusarium sp. | (4) Colletotrichum sp. | | | | |
| 84. | Soil surrounding living root is known a | as | | | | |
| | (1) Rhizosphere | (2) Rhizoplane | | | | |
| | (3) Rhizoids | (4) Rhizomorph | | | | |
| 85. | Magnesium is an important constituen | t of one of the following molecule. | | | | |
| | (1) Phytochrome | (2) Chlorophyll | | | | |
| | (3) Xanthophyll | (4) Haem protein | | | | |
| | | | | | | |

(16)

(Continued)

| 86. | Plan | ts of which fan | nilv ar | e renorte | d to assir | ni | late CO, in nig | tht. | |
|-----|------|-------------------------|---------|-----------|------------|-----|-----------------|--------------------|---|
| | | Leguminoceae (Pea etc.) | | | | | | | |
| | (2) | Crassulaceae | 39 | - 3 | etc.) | | | | |
| | (3) | Cucurbitacea | e (Bitt | er gourd | etc.) | | | | |
| | (4) | Malvaceae (H | libiscu | is etc.) | | | | | |
| 87. | | aline soil the n | | | s) of wate | er | from roots to | soil occur through | |
| | (1) | Guttation | | | (2) | | Leaching | | |
| | (3) | Exo-osmosis | | | (4) | | Evaporation | | |
| 88. | Whi | ich one is Amir | o acid | l among (| the follow | vii | ng? | | |
| | (1) | Oxalic acid | | | (2) |) | Carbonic acid | | |
| | (3) | Proline | | | (4) |) | Malic acid | | |
| 89. | 'Kra | nz' anatomy is | found | in the le | aves of | | č) | | |
| | (1) | Potato | | | (2) |) | Groundnut | | |
| | (3) | Maize | | | (4) |) | Cauliflower | | |
| 90. | Wh | ich one of the | follow | ing is C4 | plant? | | | | |
| | (1) | Wheat | (2) | Rice | (3 |) | Sugarcane | (4) Mango | |
| 91. | Wh | ich one has ep | igeal t | ype of se | ed germi | na | ution? | | |
| | (1) | Sorghum | (2) | Bean | (3 |) | Barley | (4) Turmeric | |
| | | | | | (17) | | | (Turn Over |) |

| 92. | Inter | rveinal chloros | sis in y | ounger leaves | is th | e characteristic | es deficiency symp- |
|-----|--------------|------------------|----------|-----------------|-------|------------------------------|---------------------|
| | tom | of one of the | follow | ing | | | |
| | (1) | Nitrogen | (2) | Boron | (3) | Iron | (4) Zinc |
| 93. | Gibl plan | | es esp | ecially, one of | the f | ollowing proce | ess when sprayed on |
| | (1) | Stunting | | | (2) | Rooting | |
| | (3) | Elongation | | | (4) | Transpiration | |
| 94. | In re | eduction reacti | on pro | cess what hap | pens | | |
| | (1) | Water is lost | | | (2) | Hydrogen is a | dded |
| | (3) | Hydrogen is l | ost | | (4) | Oxygen is add | ed |
| 95. | Frui | t setting is dor | ne thro | ugh parthinoc | arpy | process in one | of the following |
| | (1) | Guava | (2) | Mango | (3) | Apple | (4) Banana |
| 96. | In li | ving plant cell | conve | ersion of Pyruv | ic ac | eid into CO ₂ and | d energy is called |
| | (1) | Glycolysis | | | (2) | Photorespirati | on |
| | (3) | Krebs cycle | | | (4) | Carbon-transf | ormation |
| 97. | Asc | compared to m | ain ba | cterial chromo | som | e, the size of a | n episome is |
| | (1) | 1/10 | (2) | 1/20 | (3) | 1/30 | (4) 1/40 |
| | | | | | | | |

| 98. | Bree | eding value of an individual is | | | | | | | |
|------|--------|--------------------------------------|--------------------------------|--|--|--|--|--|--|
| | (1) | Sum of average effect of genes | | | | | | | |
| | (2) | Difference of average effect of ge | enes | | | | | | |
| | (3) | Difference of additive and domin | ance effects of genes | | | | | | |
| | (4) | Sum of additive and dominance e | ffects of genes | | | | | | |
| 99. | The | scientists who demonstrated sexua | lity in bacteria | | | | | | |
| | (1) | Leeuwenhock and Kola | (2) Lederberg and Tatum | | | | | | |
| | (3) | Kircher and Koch | (4) Louis Pasteur and Nicholas | | | | | | |
| 100. | The | term mutation breeding was given l | ру | | | | | | |
| | (1) | Hugo de Vries | (2) Jones | | | | | | |
| | (3) | Muller | (4) Nilson-Ehle | | | | | | |
| 101. | Cell | wall of Gram+ bacteria has a large | er component of | | | | | | |
| | (1) | Lipoproteins | (2) Phospholipids | | | | | | |
| | (3) | Methylamine | (4) Peptidoglycan | | | | | | |
| 102 | . In I | ndia, hybrid rice seed production is | done through | | | | | | |
| | (1) | One line system | (2) Two line system | | | | | | |
| | (3) | Three line system | (4) All of these | | | | | | |
| | | | | | | | | | |

| 103. Ha | rdy-Weinberg law is | applicable for | main | tenance of gene | tic purity of |
|----------------|-----------------------|--------------------|--------|-----------------|----------------------|
| (1) | Inbred lines | | (2) | Open Pollinate | ed Variety . |
| (3) | Hybrids | | (4) | Pureline | |
| 104. Th | e most effective mu | tagen for cytopl | asmi | c genes is | |
| (1) | Ethidium Bromide | 2 | (2) | EMS | |
| (3) | MMS | | (4) | Sodium Azide | |
| 105. pB | R322 is a | | | | |
| (1) | Degradation plasn | nid | (2) | Toxin producii | ng plasmid |
| (3) |) Walking plasmid | | (4) | Reconstructed | plasmid |
| 106. WI | nich one of these do | es not obey Mer | ndel's | s law? | |
| (1) |) Linkage | | (2) | Independent a | ssortment |
| (3) | Dominance | | (4) | Purity of game | etes |
| 107. In | a DNA sequence, if | 'A' and 'T' comp | orise | of 60%, the per | centage of C will be |
| (1) | 30% (2) | 20% | (3) | 45% | (4) 15% |
| 108. W | hich of the following | g is not true of I | ONA | ? | |
| (1) | 'A' pairs with 'T' a | nd 'G' pairs with | 'C' | (Z) | |
| (2) | Nitrogen bases ar | e 0.34 nm apart | on a | DNA strand | |
| (3) | The double helix | is 2.0 nm wide | | | |
| (4) | The double helix | is 3.4 nm wide | | | |
| | | (20 |) | | (Continued) |

| 109. Whe | 9. When demand changes due to increase in its own price it is known as | | | | | | |
|----------|--|----------|------------------|--------------|-------|----------------|-----------------------|
| (1) | Expansion in d | emand | | (2) | Cor | ntraction in d | emand |
| (3) | Increase in den | nand | | (4) | Dec | crease in den | nand |
| 110. Whi | ch holds good a | at Brea | k Even Point | ? | | | |
| (1) | Total Return = | - Total | Cost | | | | |
| (2) | Marginal Retu | ırn = N | Marginal Cost | | | | |
| (3) | Marginal Retu | urn > N | Marginal Cost | | | | |
| (4) | Total Return > Total Cost | | | | | | |
| 111. Set | ing a price belo | ow tha | t of the comp | etitio | on is | called | |
| (1) | Psychological | pricir | ng | (2) | Pri | ice skimming | g |
| (3) | Competitive p | ricing | , | (4) | Pe | netration pri | cing |
| | production fur duction at $X=$ | | $Y=3X^2-6$ | X + 1 | 15, v | what is the va | alue of elasticity of |
| (1) | 24.0 | (2) | 2.0 | (3) | 1. | 0 | (4) 0.5 |
| 113. In | marketing, 'plac | ce utili | ty' is created t | hrou | igh | | |
| (1) | Transport | (2) | Grading | (3 |) Pi | rocessing | (4) Insurance |
| | | | | | | | |

| 114. | 14. Which is not a method used in National Income Accounting? | | | | | |
|------|---|---|-------|---|--|--|
| | (1) | Output method | (2) | Income method | | |
| | (3) | Expenditure method | (4) | Export method | | |
| 115. | If N | NP _{MP} = 110; Total Subsidy = 25 an | d Tot | tal Indirect Tax = 15; then NNP_{FC} is | | |
| | (1) | 110 (2) 140 | (3) | 120 (4) 105 | | |
| 116. | All | the following curves are U shaped | excej | pt | | |
| | (1) | AVC curve | (2) | AFC curve | | |
| | (3) | ATC curve | (4) | MC curve | | |
| 117. | Wha | at distinguish an economic good fr | om a | free good? | | |
| | (1) | Equality in supply and demand | (2) | Magnitude in utility | | |
| | (3) | Value in use | (4) | Value in exchange | | |
| 118. | Cell | ular telecommunication market in | India | a is an example of —— | | |
| | (1) | Monopoly market | (2) | Duopoly market | | |
| | (3) | Oligopoly market | (4) | Perfectly competitive market | | |
| | | | | | | |

(22)

(Continued)

| 119. | The essence of Engel's law is that as family incomes rise ——. | | | | | |
|------|---|---|---------------------------------|--|--|--|
| | (1) The savings rate increases (2) The proportion of income spent on food declines | | | | | |
| | | | | | | |
| | (3) | Expenditure on food declines | | | | |
| | (4) | Proportion of income spent on luxuries declines | | | | |
| 120. | The law that determines the best uses of limited resources among alternative uses is known as | | | | | |
| | (1) | Law of variable proportion | (2) Law of equi-marginal return | | | |
| | (3) | Law of demand | (4) Law of supply | | | |
| | | | | | | |

ROUGH WORK एक कार्य

अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली/काली बाल-प्वाइंट पेन से ही लिखें)

- प्रश्न पुस्तिका मिलने के 30 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है । पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूमरी पुस्तिका प्राप्त कर लें ।
- गरीक्षा भवन में प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें ।
- ओ. एम. आर. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोई और न ही विकृत करें। दूसरा ओ. एम. आर. उत्तर-पत्र नहीं दिया जायेगा। केवल ओ. एम. आर. उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
- सभी प्रविष्टियाँ प्रथम आवरण-पृष्ठ पर नीली/काली पेन से निर्धारित स्थान पर लिखें ।
- 5. ओ.एम.आर. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें । जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुत्तिका का क्रमांक, केन्द्र कोड नम्बर तथा सेट का नम्बर उचित स्थानों पर लिखें ।
- ओ.एम.आर. उत्तर-पत्र पर अनुक्रमांक लख्या, उत्तर-प्रस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक संख्या और ओ.एम.आर. उत्तर-पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमित नहीं है।
- उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रभाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
- 8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार बैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको ओ, एम, आद, उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाइ। करना ै।
- प्रत्येक प्रश्न के उत्तर के लिए केवल एक ही वृत को माहा करें । एक से अधिक वृत्तों को गाहा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा ।
- 10. ध्यान दें कि एक बार स्थाही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
- रफं कार्य के लिए प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाला पृष्ठ तथा उत्तर-पुस्तिका के अंतिम पृष्ठ का प्रयोग करें ।
- 12. परीक्षा की समाप्ति के बाद अध्यर्थी अपना ओ॰एम॰आर॰ उत्तर-पत्र परीक्षा कक्ष/हाल में कक्ष निरीक्षक को सौंप दें । अध्यर्थी अपने साथ प्रश्न पुस्तिका तथा ओ॰एम॰आर॰ उत्तर-पत्र की प्रति ले जा सकते हैं ।
- 13. अभ्यर्थी को परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी ।
- यदि कोई अध्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की.
 भागी होगा/होगी ।