Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18HO2016** | **Duration :** | **3hrs** |
| **Sub. Name :** | **SEED PRODUCTION OF VEGETABLE, TUBER AND SPICE CROPS** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | **Course Outcome** | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | |
| 1. | Expand ISTA. Where is it located? | CO3 | 1 |
| 2. | What is SMR? | CO1 | 1 |
| 3. | What is volunteer plants? | CO1 | 1 |
| 4. | What is isolation distance? | CO1 | 1 |
| 5. | What is protogynous flower? | CO1 | 1 |
| 6. | Mention isolation distance for foundation and certified seed production of Cauliflower. | CO2 | 1 |
| 7. | Describe Orthodox seed with example. | CO1 | 1 |
| 8. | Mention the packaging materials used for seed storage. | CO1 | 1 |
| 9. | What is scalping in seed processing? | CO1 | 1 |
| 10. | What is Half seed rule? | CO3 | 1 |
| 11. | Mention the working principles for Gamet Divider and Boerner divider. | CO3 | 1 |
| 12. | How to arrest the shoot growth in ginger during storage? | CO2 | 1 |
| 13. | Why are turmeric flowers found at the base of the plant? | CO2 | 1 |
| 14. | What is Blanching? | CO2 | 1 |
| 15. | Mention the reason for Whip tail symptom. | CO2 | 1 |
| 16. | Give a note on deheading. | CO2 | 1 |
| 17. | What is cleistogamy? | CO1 | 1 |
| 18. | Mention the required seed treatment during Coriander seed sowing. | CO2 | 1 |
| 19. | What are the stages of field inspection in cauliflower seed production plot? | CO2 | 1 |
| 20. | What is the reason for cross pollination in carrot? | CO2 | 1 |

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| **PART – B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | What is a seed? Mention the differences between grain and seed. | CO1 | 5 |
| 22. | Elaborate on generation system of seed multiplication. | CO1 | 5 |
| 23. | Explain the different Seed Extraction methods in Tomato. | CO2 | 5 |
| 24. | Explain Post harvest handling of seed crop. | CO3 | 5 |
| 25. | Explain Seed quality control factors and Harrington Thumb Rule In Seed Storage and how to maintain the seed viability in storage. | CO3 | 5 |
| 26. | Explain the Sequence flow of seed lot in a processing and types of materials removed during seed processing. | CO3 | 5 |
| 27. | What is the principle of sampling? Explain types of samples in STL and sampling intensity for seed lots in bags. | CO3 | 5 |
| 28. | Explain seed extraction methods for dry and wet fruit. | CO2 | 5 |
| 29. | Explain Seed production in moringa. | CO2 | 5 |
| 30. | Write the Seed production technique in Radish. | CO2 | 5 |
| 31. | Explain GMS in hybrid seed production in okra. | CO2 | 5 |
| 32. | What are the different methods of mixing and dividing of seeds? | CO3 | 5 |

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| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
| 33. | a. | Explain the genetic principles of seed production. | CO1 | 15 |
| b. | Write down the ecological factors affecting the quality seed production. | CO1 |
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| 34. | a. | Write down the seed production methods in oinion. | CO2 | 15 |
| b. | Write note on the Principle of Seed germination test and its types. Categorize the seedlings in germination test. | CO3 |
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| 35. | a. | Write down the Head to seed method of cabbage seed production and mention their advantages and disadvantages. | CO2 | 15 |
| b. | Explain Seeds Act, 1966. | CO3 |