## Department of Botany, S.P. Pune University, Pune-411 007

## **M.Sc. Botany Entrance Test**

| 10 <sup>th</sup> June 2016 | Maximum Marks: 100        | Time: | 180 Minut | tes |   |
|----------------------------|---------------------------|-------|-----------|-----|---|
|                            | Seat No. in words:        |       |           |     |   |
| Sign of the Invigilator    |                           |       |           |     | _ |
|                            | Seat No. of the Candidate |       |           |     |   |

## INSTRUCTIONS FOR THE CANDIDATE

## Read the following instructions carefully

- 1. Write your Seat No. in the space provided on the top of this page, as well as on the answer sheet supplied to you. If you write your name or any special marks on any part of this document, which may disclose your identity, you will be liable for disqualification.
- 2. This booklet contains **100 multiple choice type of questions**.
- 3. Each question has four alternative responses marked a, b, c and d. You have to darken the correct response using pen against each questions indicated below.

- 4. Each question carries one mark.
- 5. Your responses to the questions for this paper are to be indicated on the answer sheet provided. Responses like (X) or or  $\sqrt{}$  and light shading will not be considered or evaluated.
- 6. Answer marked on the body of the question paper **WILL NOT BE** evaluated.
- 7. One sheet is attached at the end of booklet for rough work.
- 8. You should return the test booklet and answer sheet to the invigilator at the end of this test. Do not carry any paper outside the examination hall.

| 9. The origin of a. parie  | -   | ngiosperms is from t   | he followin                           | _                   |  |  |
|----------------------------|---|------------------------|---------------------------------------|---------------------|--|--|
| -                          | arietal layer and con                           |                        | d. sporogen                           |                     |  |  |
| 10. The type of            | ovule in family Cac                             | ctaceae is             |                                       |                     |  |  |
| a.Orthotropu               | b.anatrop                                       | us c.circin            | otropus                               | d. amphitropus      |  |  |
| 11. The cobs of            | f maize consist of                              |                        |                                       |                     |  |  |
| a. male flowers            |   | b. female flow         | b. female flowers                     |                     |  |  |
| c. male and female flowers |   | d. male, female        | d. male, female and neutral flowers   |                     |  |  |
| 12. The endospe            | erm in angiosperms                              | usually develops fro   | om fusion of                          | f                   |  |  |
| a. three diploid nuclei    |   | b. three triploid      | b. three triploid nuclei              |                     |  |  |
| c. three haploid nuclei    |   | d. one haploid         | d. one haploid and two diploid nuclei |                     |  |  |
| 13. The shoot a            | pex in embryo occu                              | pies lateral position  | in                                    |                     |  |  |
| a.Poaceae                  | b. Asteraceae                                   | c. Fabaceae            | d.Ba                                  | alsaminaceae        |  |  |
| 14. In Dracaeno            | a the secondary can                             | nbium originates from  | m                                     |                     |  |  |
| a.Vascular ca              | ambium b. Cortex                                | c.Endodermis           | d. P                                  | hloem               |  |  |
|                            | resist the bending str<br>issues are distribute | ress in aerial cylindr | ical plant pa                         | arts like stems the |  |  |
| a. near the p              | eriphery in a circle                            | in the form of girder  | rs                                    |                     |  |  |
| b. near the c              | enter in the form of                            | column                 |                                       |                     |  |  |
| c. near the b              | ase in the form of c                            | compact mass of cells  | s                                     |                     |  |  |
| d. near the a              | pex in the form of c                            | liscrete patches       |                                       |                     |  |  |
|                            |   | 1 £                    |                                       |                     |  |  |
| 16. Multiple epi           | idermis is seen in th                           | ie leaves of           | •                                     |                     |  |  |