

Test Registration No. \_\_\_\_\_



**The Maharaja Sayajirao University of Baroda**  
**Faculty of Science**

**M.Sc. ENTRANCE EXAMINATION**

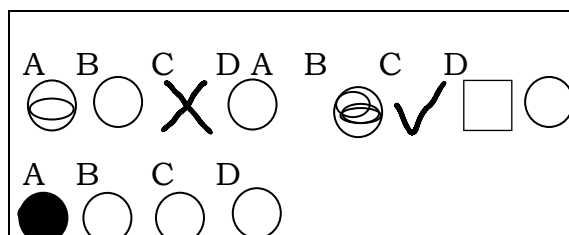
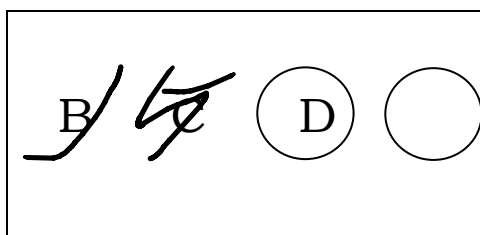
SUBJECT: Botany  
DAY: Monday

TIME : 10.00-11.30 AM  
DATE : 4<sup>th</sup> July 2022

Important Instructions:

1. This test booklet is to be opened only when instructed by the invigilators to do so.
2. This booklet carries 100 questions in 8 printed pages. All carry equal marks.
3. For every correct answer, candidate will earn 1 mark, for every wrong answer 25% mark will be deducted.
4. Test Registration Number must be entered correctly in the OMR answer sheet, as advised by the invigilators. The Question Booklet code (A/B/C/D) must also be marked on the OMR answer sheet (if not printed already) as instructed.
5. Answers must be marked in the OMR answer sheet using a black or dark blue ball point pen only. The circle should be filled in completely, leaving no gaps.
6. Gadgets (Mobile phones, pagers, ear phones, music players, calculators smart watches etc.) are strictly prohibited in the exam hall. If any candidate is found in possession of any of these at his/her exam seat, he/she is liable to be disqualified.
7. In case of tie in the marks the merit will be considered based on total marks in qualifying examination.

Correct way of marking answer: Incorrect way of marking answer:



Invigilator's Signature: \_\_\_\_\_









61. In C4 plants, the cells which do not possess chlorophyll is known as \_\_\_\_\_  
 a) Bundle sheath      b) Mesophyll      c) palisade      d) Spongy
62. \_\_\_\_\_ belongs to dicot which has the largest leaf.  
 a) *Coccoloba giantifolia*      b) *Magnolia grandiflora*  
 c) *Tectona grandis*      d) *Pterygota alata*
63. .... is an endemic disease  
 a) Citrus canker      c) little leaf of brinjal  
 b) TMV      d) Wart disease of potato
64. The organism *Trichoderma* is used as .....  
 a) Phosphate fertilizer      c) Growth hormone  
 b) Antagonist      d) Edible fungus
65. In absence of specific host, if a pathogen starts growing on other alternative host for its survival, such pathogen is called as .....  
 a) Facultative parasite      b) Obligate parasite  
 c) Pseudo-parasite      d) Nonspecific parasite
66. Due to the presence of pathogen, when a cell fails to carry out its normal function and dies. Such state is said to be..  
 a) Abnormal      b) Symptomatic      c) Asymptomatic      d) Diseased
67. Haploid ..... infect alternative host barberry  
 a) Urediospore      b) Aecidiospore      c) Teleutospore      d) basidiospores
68. The presence of a \_\_\_\_\_ type of pit is especially characteristics of most of Coniferales.  
 a) Torus      b) Simple pit      c) Bordered pit      d) Vestured pi
69. \_\_\_\_\_ is responsible for preventing the folding of the cellulose microfibrils in plant cell wall.  
 a) Lipids      b) Lignin      c) Hemicelluloses      d) protein
70. One of the main component of cell wall is cellulose ad the molecule of cellulose consist of long chain of \_\_\_\_\_ residues.  
 a) Glucose      b) lipids      c) phospholipids      d) polysaccharids
71. The protective layer developed during the secondary growth of the stem is called...  
 a) Epidermis      b) Periderm      c) Rhizodermis      d) Phellogen
72. The change from meristematic tissue to permanent tissue is called...  
 a) Differentiation.      b) Self-perpetuating  
 c) Photosynthesis.      d) Cell division
73. Phloem that is embedded within the secondary xylem is called \_\_\_\_\_ phloem.  
 a) Internal      b) Intraxylary      c) Interxylary      d) Medullary
74. Movement of water and minerals into the vascular column of a root is controlled by ...  
 a) Stomata      b) Spongy mesophyll cells      c) Vascular cambium      d) Endodermis
75. \_\_\_\_\_ among the following would be having the lowest intrinsic rate of growth 'r'.  
 a) Large trees      b) grasses      c) bacteria      d) unicellular alage
76. Which biome is characterized by low temperature and low precipitation?  
 a) Savannah      b) Subtropical desert      c) Temperate grassland      d) Tundra

77. The ocean currents move in a clockwise manner in the \_\_\_\_\_.
- a) Northern Hemisphere      b) Southern Hemisphere      c) Antarctic ocean      d) Equator
78. Which plant hormone was also initially known as Dormin?
- a) Kinetin      b) Dihydrozeatin      c) ABA      d) Zeatin
79. Which of the following enzyme is not involved in the C<sub>3</sub> cycle?
- a) RUBISCO      b) Aldolase  
c) fructose 1,6, biphosphatase      d) Amylase
80. Plants are multicellular eukaryotes with tissue systems made of various cell types that carry out specific functions. Plant tissues are mostly composed of cells which are \_\_\_\_\_ in response and perform a specific \_\_\_\_\_.
- a) similar and function      b) dissimilar and function  
c) functional and similar      d) Functional and dissimilar
81. What kind of bonds are always broken after an introduction of Endonucleases
- a) Covalent bond      b) hydrogen bond      c) both      d) none
82. An organism which has mechanisms to protect themselves from their own restriction enzymes
- a) Plants      b) Animals      c) viruses      d) Bacteria
83. A sequencing Method which requires DNA synthesis and termination of chain elongation
- a) Chemical      b) physical      c) enzymatic      d) natural
84. ADNA must be transferred onto a \_\_\_\_\_ support for further analysis
- a) Nitrocellulose paper      b) Nylon paper  
c) Cloth      d) plastic paper
85. Gene of known function and location in a genome is known as
- a) segment      b) syndrome      c) marker      d) stretch
86. The scoring of \_\_\_\_\_ bands are open for interpretation and results are not easily reproducible between laboratories
- a) AFLP      b) RFLP      c) SSR      d) RAPD
87. Genetic information is stored in the \_\_\_\_\_ of nucleotides in DNA.
- a) order      b) chain      c) beads      d) knots
88. Name with no accompanying description is called as \_\_\_\_\_
- a) Tutonym      c) *Nomen nudum*  
b) Homonym      d) Later homonym
89. Tri-seriate perianth and multi-pistillate, apocarpus gynoecium is character of \_\_\_\_\_
- a) Rutaceae      c) Sterculiaceae  
b) Myrtaceae      d) Anonaceae
90. Family \_\_\_\_\_ is characterized by leaf opposed inflorescence and terminal bud developing into tendril
- a) Vitaceae      c) Verbenaceae  
b) Mimosaceae      d) None of the above
91. Presence of gynophoric flower with 6 to many stamens is a character of \_\_\_\_\_
- a) Sterculiaceae      c) Capparidaceae  
b) Mimosaceae      d) Tiliaceae

