

2020

## BOTANY — HONOURS

Paper : CC-6

Full Marks : 50

*The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer the following questions :

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|---|-----|
| (a) What is perisperm? Give an example.               | 1+1 |
| (b) What is a compound spadix inflorescence?          | 1   |
| (c) Define schizocarpic fruit. Give an example.       | 1+1 |
| (d) Define aggregate fruit.                           | 1   |
| (e) What is hypocrateriform corolla? Give an example. | 1+1 |
| (f) What is apogamy?                                  | 1   |
| (g) How a spike differs from a raceme inflorescence?  | 1   |

2. Answer **any two** from the following :

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|---|-------|
| (a) Write a short note on apomixis in angiosperms.                                      | 5     |
| (b) Distinguish between cyathium and hypanthodium inflorescences with one example each. | 2½+2½ |
| (c) With suitable examples describe different fleshy indehiscent fruits.                | 5     |
| (d) Describe different types of pollen tube entry into ovule with examples.             | 5     |

3. Answer **any three** from the following :

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|--|-------------|
| (a) What is cymose inflorescence? Describe different types of cymose inflorescences.       | 2+8         |
| (b) Define double fertilization. Describe double fertilization with suitable diagrams.     | 3+7         |
| (c) What is megasporogenesis? Describe monosporic and bisporic types of megagametogenesis. | 2+4+4       |
| (d) Describe the genetic and molecular aspects of flower development.                      | 10          |
| (e) With labelled diagrams describe four different types of ovule.                         | 2½+2½+2½+2½ |
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