| (i) Prin  | ited P | ages          | 0 1/12              | hors                         | oll No  | offetors   |       |
|---|--------|---------------|---------------------|------------------------------|---------|--|-------|
| `'  | estion |               | :9                  |                              | Cod     | e: 0 2 5   | 3     |
|   |        | B.A           | A./B.Sc. (G         | eneral)                      | 3rd Sen | nester   |       |
|   |        |               |                     | (2123)                       |         |  |       |
|   |        |               | В                   | OTANY                        |         |  |       |
| Paper-  | —(A:   | Div           | ersity of S         | eed Plan                     | ts & tl | neir Systematics-  | -I)   |
| Time All  | owed   | :Th           | ree Hours           | ] .                          |         | Maximum Marks  | : 36  |
| 1. (A)  | of 8 m | mark<br>ore o | s, comprisi         | ng 4 MCC<br>selecting<br>ch. | 2&4f    | 1 is compulsory a fill in the blanks. Attach from units I to | empt  |
|   | (1)    | Mar           | noxylic wo          | od is fou                    | nd in   |  |       |
|   |        | (a)           | Cycas               |                              | (b)     | Pinus  |       |
|   |        | (c)           | Ephedra             |                              | (d)     | All  |       |
|   | (2)    |               | ich Gymno<br>apan ? | sperm is                     | grown   | & worshipped in  | China |
|   |        | (a)           | Ephedra             |                              | (b)     | Taxus  |       |
|   |        | (c)           | Araucaria           | a                            | (d)     | Ginkgo biloba  |       |
| (3) Coralloid Roots of Cycas are also known as: |        |               |                     |                              |         |  |       |
|   |        | (a)           | Mycorrhi            | za                           | (b)     | Corallorhiza   |       |
|   |        | (c)           | Deep fee            | eder                         | (d)     | Rhizoidal  |       |

|     |      | (4)    | Poll   | ination in C    | rymnosp   | berms   | IS:        |             |        |
|-----|------|--------|--------|-----------------|-----------|---------|------------|-------------|--------|
|     |      |        | (a)    | Zoophily        |           | (b)     | Entomopl   | nily        |        |
|     |      |        | (c)    | Anemophil       | у         | (d)     | All        |             |        |
|     | (B)  | Fill i | n the  | Blanks:         |           |         |            |             | 4      |
|     |      | (1)    | Joint  | red Fir is the  | common    | name    | of Gymnos  | sperm, nam  | ely    |
|     |      | (2)    |        | and Seeds       |           | n Gym   | nosperm y  | ields a Sta | rch    |
|     |      | (3)    | Lon    | gest neck of    | Archigo   | onia is | found in   |             |        |
|     |      | (4)    | Foli   | age leaves      | or Need   | dles in | Pinus ar   | e present   | on     |
|     |      |        |        |                 |           |         |            |             |        |
|     |      |        |        | U               | NIT—I     |         |            |             |        |
| 2.  | (a)  | Wri    | te any | 2 importar      | nces of ( | Cycas,  | Pinus & E  | Ephedra ea  | ch.    |
|     | (b)  |        | te an  | ny 4 differrms. | rences    | betwe   | een Gymr   | nosperms    | &<br>4 |
| 3.  | (a)  |        | w Lif  | e Cycle of (on. | Gymnosj   | perms   | showing A  | Alternation | of 5   |
|     | (b)  | Diff   | erent  | iate betwee     | n Mano    | xylic & | & Pycnoxy  | lic wood.   | 2      |
|     |      |        |        | U               | NIT—II    | ]       |            |             |        |
| 4.  | (a)  | Desc   | cribe  | any 2 Type      | s of Fo   | ssils.  |            |             | 4      |
|     | (b)  | Wha    | at are | the rules for   | or the N  | omen    | clature of | Fossils?    | 3      |
| 025 | 3/PB | -107   | 79     |                 | 2         |         |            | [Turn ov    | ver    |

| ,5. | (a) | Describe the Morphology/ Reconstruction of Fossil Pl Williamsonia. | ant<br>3  |
|-----|-----|--|-----------|
|     | (b) | Describe the Periods & Epochs of Coenozoic Era.                    | 4         |
|     |     | UNIT—III   |           |
| 6.  | (a) | Describe the External Morphology of Cycas.                         | 5         |
|     | (b) | Write a note on Antherozoid of Sago Palm.                          | 2         |
| 7.  | (a) | Describe the structure of Ovule in Cycas.                          | 4         |
|     | (b) | Show the 3 generations found in Cycas seed by mak<br>Diagram.      | ting<br>3 |
|     |     | UNIT—IV  |           |
| 8.  | (a) | Write a note on Long & Dwarf shoot of Pinus.                       | 3         |
|     | (b) | Explain the process of Embryogeny in Pinus.                        | 4         |
| 9.  | (a) | Write a short note on the Morphology of Ephedra.                   | 4         |
|     | (b) | Describe the structure of Archigonium in Ephedra.                  | 3         |