

**CERTIFICATE IN MOBILE
APPLICATION DEVELOPMENT
(CMAD)**

Term-End Examination

December, 2024

BCS-094 : PROGRAMMING USING PYTHON

Time : 3 Hours

Maximum Marks : 75

Note : *Question No. 1 is compulsory. Answer any
three questions from the rest.*

1. (a) Differentiate between widgets and layouts ? Briefly discuss Grid layout, Anchor layout, Stock layout and Relative layout. 6
- (b) Write SQL CRUD statements with example for each in Python. 6
- (c) Define debugging. Briefly discuss any two debugging modules of Python. 6

- (d) Explain the concept of overloading with suitable example code in Python. 6
- (e) What are 'language translators' ? Briefly discuss the types of language translators. 6
- 2. (a) What is WxPython ? What is the role of WxObject class and control module in GUI application development ? List the various modules and respective submodules in WxPython. 10
- (b) Briefly discuss the utility of Kivy launcher. How does it differ from the Buildozer tool ? 5
- 3. (a) Draw the block diagram for Kivy Architecture and explain each of its components. 10
- (b) List the Mobile application development platform and Programming language used for Android and iOS. 5
- 4. (a) Draw block diagram to represent the various stages of software development life cycle. Also, explain the various testings performed during the development of any software. 10

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(b) Differentiate between the following : 5

(i) Functional and Non-functional testing

(ii) Alpha and Beta testing

5. Write short notes on following with example :

3×5=15

(a) White Box testing

(b) Semantic errors

(c) Immutable data types

(d) `_ str _` method

(e) HDL (Hardware Description Language)

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