



COMSATS UNIVERSITY ISLAMABAD

Islamabad Campus
Department of Computer Science
Terminal Exam

Class: BSE-6 A/B / BCS 5-A/B
January 18, 2022

Instructors: **Mr. Waseem Abbas / Mr. Farooq Azam**

Course:

CSC 336-Web Technologies

Total Time: **180 Minutes**

Max Marks:

50

Note: Question paper contains 4-pages, Attempt all questions in order.

Question # 1 [CLO-C1]: [5-Marks]

- 1.a Discuss different web application development approaches. (3)
- 1.b Why ubiquitous web applications are complex to develop in comparison to transactional, social or portal oriented web apps? (2)

Question # 2 [CLO-C2]: [10-Marks]

- 2.a Use Bootstrap grid system to generate following layout for the **small screen size and above** devices as shown in the Figure below: (5)

