



DBJ-003-1083001

Seat No. _____

M. Sc. (IT&CA) (Sem. III) Examination

June - 2022

**CS-13: Hybrid Mobile Applications Development
Using Web Technologies**

Faculty Code: 003

Subject Code: 1083001

Time: **2.30** Hours]

[Total Marks: **70**

Instruction: Attempt any five of the following.

- 1 (a) Attempt the following: 4
- (1) A _____ application is one that combines elements of both native and web applications.
 - (2) _____ input type accepts only numerical value.
 - (3) _____ attribute specifies that an input field must be filled out.
 - (4) Give full form of CSS.
- (b) Explain url type of input element with suitable example. 2
- (c) Explain audio and video tag with suitable example. 3
- (d) Explain any five form validation with example. 5
- 2 (a) Attempt the following: 4
- (1) _____ element is used to represent the result of different types of output, such as output written by a script.
 - (2) _____ attribute specifies the maximum number of character for an input field.
 - (3) _____ attribute specifies the maximum value for an input field.
 - (4) Give full form of SASS.
- (b) Explain range type of input element with suitable example. 2
- (c) What is the need of Hybrid Mobile Application? 3
- (d) Explain local storage with suitable example. 5

- 3 (a) Attempt the following: 4
- (1) In Java script, variables are declared using _____ keyword.
 - (2) _____ selector selects all elements available in a DOM.
 - (3) _____ directive initializes application data.
 - (4) The _____ directive binds the value of HTML controls to application data.
- (b) What is JQuery? 2
- (c) Explain ng-show and ng-hide with suitable example. 3
- (d) Explain service in angularJS with suitable example. 5
- 4 (a) Attempt the following: 4
- (1) _____ directive repeats html elements for each item in a collection.
 - (2) # is used to define _____ selector.
 - (3) JQuery _____ are used to select and manipulate HTML elements.
 - (4) The _____ directive defines the controller.
- (b) What is route in angularJS? 2
- (c) Explain function in JavaScript. 3
- (d) Explain ng-model, ng-app, ng-bind with suitable example. 5
- 5 (a) Attempt the following: 4
- (1) The main class for all the bars is _____ class.
 - (2) _____ class is used to add avatar in list as an item.
 - (3) Give full form of CLI.
 - (4) _____ is a container element for the whole Ionic app.
- (b) How to add headers in ionic? 2
- (c) Explain List component with suitable example. 3
- (d) Explain ionic Javascript Action Sheet component with example. 5

- 6** (a) Attempt the following: **4**
- (1) The main class for all the button types in _____ class.
 - (2) _____ class is used to add thumbnails in list as an item.
 - (3) _____ command is used to serve your app on the web browser.
 - (4) If you have not set any colour to the required element, it sets the primary colour by default. True or False.
- (b) What is themes in ionic? **2**
- (c) Explain tabs with suitable example. **3**
- (d) Explain ionic Javascript Popup component with example. **5**
- 7** (a) Attempt the following: **4**
- (1) In _____ type of array each key has its own specific value.
 - (2) _____ function inserts one or more elements to the end of an array.
 - (3) Which function search an array for a value and returns the key?
 - (4) Give full form of JSON.
- (b) Explain json_encode(). **2**
- (c) Explain NodeJS and express-NodeJS. **3**
- (d) Explain insertion and selection with PHP and MySQL. **5**
- 8** (a) Attempt the following: **4**
- (1) What is an array?
 - (2) _____ function deletes the last element of an array.
 - (3) Which function searches an array for a specific value?
 - (4) Node JS applications uses single threaded event loop model architecture to handle multiple concurrent clients. True or False.
- (b) Explain json_decode (). **2**
- (c) Explain associative array with suitable example. **3**
- (d) Explain architecture of NodeJS. **5**

- 9** (a) Answer the following: **4**
- (1) Give full form of VCS.
 - (2) _____ command sends local commits to the remote repository.
 - (3) _____ command is used to switch from one branch to another.
 - (4) _____ ionic plugin allows us to record and playback audio files on a device.
- (b) What is the use of commit and rollback command in git? **2**
- (c) Explain ionic-cordova InAppBrowser with example. **3**
- (d) Write steps to build android app and publishing it on playstore. **5**
- 10** (a) Answer the following: **4**
- (1) Give full form of npm.
 - (2) _____ command returns the current state of the repository.
 - (3) The cordova _____ plugin is used to open external links from your app inside a web browser.
 - (4) The git _____ command creates a new git repository.
- (b) Explain push and pull in git. **2**
- (c) Explain git branches. **3**
- (d) Explain ionic-cordova media with suitable example. **5**
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