

SEAT No. _____

No. of Printed Pages : 02

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SARDAR PATEL UNIVERSITY
M.Sc. (Mobile Technology & Applications)
External Examination - Nov, 2017

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SEMESTER- III
PS03CMTA01 - (Advanced Android Programming)

Date: 2/11/2017 (Tuesday)

Time: 2:00 p.m. to 5:00 p.m.

Maximum Marks: [70]

Q-1 Choose the most appropriate option for each question.

[08]

1. What does the .apk extension stands for?
 - A. Application Package
 - B. Application Program Kit
 - C. Application Proprietary Kit
 - D. Android Package.
2. Which among these are not part of Android's native library?
 - A. Webkit
 - B. Delvik
 - C. OpenGL
 - D. SQLite
3. **True or False.** The R.Java file is where you can edit the resources for your project.
4. What built in database is Android shipped with?
 - A. Apache
 - B. MySQL
 - C. Oracal
 - D. SQLite
5. What is Manifest.xml in android?
 - A. It has information about layout in an application
 - B. It has the information about activities in an application
 - C. It has all the information about an application
 - D. None of the above
6. What is fragment in android?
 - A. JSON
 - B. Peace of Activity
 - C. Layout
 - D. None of the above.
7. Status data will be exposed to the rest of the android system via.
 - A. Intents
 - B. A Content Provider
 - C. Network Receiver
 - D. Altering Permissions.
8. Which permissions are required to get location in android?
 - A. ACCESS_FINE and ACCESS_COARSE
 - B. GPRS Permission
 - C. WiFi Permission
 - D. Internet Permission

- Q-2 Answer the following questions (Any Seven) [14]**
1. What is Android? List Android SDK features.
 2. What is Permissions? List Android Permissions and use of it.
 3. Explain Fragment life cycle.
 4. List native adapters. Explain any one in detail.
 5. List and explain Android databases.
 6. Explain Android Dialogs.
 7. What is Ninepatch drawables?
 8. What is Location based services?
 9. What is Intent? List and explain types of intents.
- Q-3 Answer the following questions:**
- [A] Write a note on the Android Software Stack [06]
 [B] Write a note on Manifest file in detail. [06]
- OR**
- [B] Write a note on Layouts in Android. [06]
- Q-4 Answer the following questions:**
- [A] Explain Android Menu System. [06]
 [B] Write a note on types of Animation in Android. [06]
- OR**
- [B] Write a note on Broadcast receivers. [06]
- Q-5 Answer the following questions:**
- [A] Write a note on Data Persistence techniques in Android. [06]
 [B] Explain Native Android Content Providers. [06]
- OR**
- [B] Explain MediaPlayer class in detail. [06]
- Q-6 Answer the following questions:**
- [A] Write a note on SQLite databases. [06]
 [B] Write a note on Telephony and SMS. [06]
- OR**
- [B] Write a note on LBS. Also Explain Geocoder. [06]

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SEAT No. _____

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No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY

M.Sc. (Mobile Technology & Applications)

External Examination - Nov, 2017

SEMESTER- III

PS03CMTA02 - (iPhone Application Development)

Date: 6/11/2017 (Monday)

Time: 2:00 p.m. to 5:00 p.m.

Maximum Marks: [70]

Q-1 Choose the most appropriate option for each question.

[08]

1. Which of the following framework is not used in iOS ?
 - a)UIKit Framework
 - b)AppKit Framework
 - c)Foundation Framework
 - d)CoreMotion Framework
2. Application running in foreground but currently not receiving any events. What is the current state of Application?
 - a)Background state
 - b)Inactive State
 - b)Suspended state
 - c)Active State
3. True or False. Interface declares the behavior of class and implementation defines the behavior of class.
4. The iPhone has a feature that activates when you rotate the device from portrait to landscape.
 - A. Rotator
 - B. Accelerometer
 - C. Shadow detector
 - D. Special Sensor
5. Which of the following is a default UI property?
 - a)assign
 - b)non-atomic
 - c)atomic
 - d)None of them
6. True or False. You could add category to the NSString class. For example to extend its functionality.
7. Flash Applications is supported in iPhone browsers. Is it true?
 - a)Yes
 - b)No
 - c)It supports flash applications from apple only.
 - d)Supports partially
8. iOS stands for ?
 - a)Internetwork Operating System
 - b)iPhone Operating System
 - c)Internet Operating System
 - d)None of Them

- Q-2 Answer the following questions (Any Seven) [14]**
1. List the system requirements for iOS programming. Also list features provided as a part of MAC devices.
 2. What is Objective C. What are mutable and immutable types in objective c?
 3. List iOS version. Also explain layers of iOS.
 4. Write a short note on Objective C protocol with proper example.
 5. Explain XIB, NIB, IBOutlet and IBActions.
 6. List and explain built in functions used in SQLite.
 7. Explain Fast Enumeration in Objective C.
 8. Write a short note on Property List.
 9. Write a note on use of 'Extern' keyword with example. Also explain LValue and RValue in Objective C.
- Q-3 Answer the following questions:**
- [A] Write a note on Objective- C Categories and Extensions. [06]
- [B] Explain an iOS Architecture in detail. [06]
- OR**
- [B] Write a note on Objective-C Protocol with proper example. [06]
- Q-4 Answer the following questions:**
- [A] Write a note on Objective-C Memory Management. [06]
- [B] List and explain Objective-C Foundation Classes based on functionality. [06]
- OR**
- [B] Explain Objective-C Error Handling with proper example. [06]
- Q-5 Answer the following questions:**
- [A] Explain Inheritance and Method Overloading in Objective-C. [06]
- [B] What is Data Persistence. Also Explain SQLite DML Statements. [06]
- OR**
- [B] Explain in detail [1] NSArray and [2] NSDictionary. [06]
- Q-6 Answer the following questions:**
- [A] Write a note on Core Data Stack. [06]
- [B] Explain in detail: [1] Image View [2] Web View [06]
- OR**
- [B] Explain in detail: [1] DatePicker [2] ImagePicker [06]

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No. of Printed Pages : 2

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SARDAR PATEL UNIVERSITY
M.Sc.(Mobile Technology & Applications)
SEMESTER-III
External Examination-2017
PS03CMTA03-Enterprise Application Development

8th Nov, 2017
Wednesday

Time: 02:00 pm to 05.00 pm

Marks:70

- Q1 Give answers of following Multiple choice questions [8]
- 1 Which is a server-side component, it is required to be deployed on the server?
A EJB
B RMI
C Both A & B
D None of the above
 - 2 EJB is like COM, Abbreviate the term COM?
A Component Object Model
B Component Oriented Model
C Common Object Model
D Common Oriented Model
 - 3 On which pattern does struts framework is based on?
A MVC2 Pattern
B Bridge Pattern
C MVC 1 Pattern
D None of these
 - 4 Abbreviate the term OGNL?
A Object-Goal Navigation Language
B Object- Graph Navigation Language
C Oriented-Graph Navigation Language
D None of these
 - 5 RMI uses which objects for the communication with the remote object?
A Stub
B Skeleton
C Both A & B
D None of these
 - 6 Which method of the Naming class (found in java.rmi) is used to update the RMI registry on the server machine?
A rebind ()
B lookup()
C Both A & B
D None of these
 - 7 Which models does JDBC API supports for database access?
A Two-tier models
B Three-tier models
C Both A & B
D None of these
 - 8 Hibernate is an?
A Open Source
B Lightweight
C ORM
D All mentioned above

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(P.T.O)

- Q2 **Do as directed (Any 7)** [14]
- 1 Write a short note on Thread.
 - 2 What are difference between Comparator and Comparable.
 - 3 Write a short note on Statement Interface.
 - 4 Enlist JSP Implicit Objects.
 - 5 What is the difference Between Get and Post.
 - 6 What are the features of Struts?
 - 7 What do you mean by InetAddress?
 - 8 Short note on Hibernate Session and Hibernate Configuration?
 - 9 Write a program to show the use of thread priorities?
- Q3 [A] Write short note on J2EE architecture. Explain various components. [6]
- Q3 [B] Difference Between ArrayList and Vector using with example. [6]
- OR**
- Q3 [B] Explain Collection Framework using with proper example. [6]
- Q4 [A] List down the 4 types of JDBC Drivers & explain them in brief. [6]
- Q4 [B] What are servlets in Java ? Discuss Servlet life cycle methods. Explain role of web container. [6]
- OR**
- Q4 [B] Explain different types of JSP tags. [6]
- Q5 [A] Explain RMI architecture and also explain stub and skeleton. [6]
- Q5 [B] Draw and explain MVC Architecture. [6]
- OR**
- Q5 [B] Explain Struts Architecture. [6]
- Q6 [A] What is Hibernate? Write down Advantages and Disadvantages of Hibernate. [6]
- Q6 [B] What are the differences between Java Bean and basic java class? Explain Java Bean Architecture. [6]
- OR**
- Q6 [B] Draw and explain the architecture of Hibernate. [6]

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SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY
M.Sc. (Mobile Technology & Applications)
External Examination - Nov, 2017
SEMESTER- III
PS03CMTA04 - (Cloud Computing)

Date: 10/11/2017 (Friday)
Time: 2:00 p.m. to 5:00 p.m.

Maximum Marks: [70]

Q-1 Choose the most appropriate option for each question.

[08]

1. In which category of SaaS service does Customer Relationship Management (CRM) software fall?
 - A. Consumer Services
 - B. Communication Services
 - C. Infrastructure Services
 - D. Business Services
2. _____ serves as a PaaS vendor within Google App Engine system.
 - A. Google
 - B. Amazon
 - C. Windows
 - D. All of the above.
3. _____ is the most refined and restrictive service model.
 - A. SaaS
 - B. PaaS
 - C. CaaS
 - D. All of the above.
4. Which of the following can be considered PaaS offering?
 - A. Google Map
 - B. Gmail
 - C. Google Earth
 - D. All of the above
5. **True or False:** A Cloud environment can be accessed from anywhere in the world as long as the user has access to the Internet.
6. Which are the technologies working behind the cloud computing platforms?
 - A. Virtualization
 - B. Service Oriented Architecture (SOA)
 - C. Grid Computing
 - D. Utility ComputingAll of the above.
7. Which service offerings principally provide an environment in which to develop, deploy and operate applications?
 - A. Infrastructure-as-a-Service (IaaS)
 - B. Platform-as-a-Service (PaaS)
 - C. Software-as-a-Service (SaaS)

D. Cloud Service

8. PaaS can be classified into _____ types.
- A. Two
 - B. Three
 - C. Four
 - D. Six

Q-2 Answer the following questions (Any Seven)

- 1. List and explain characteristics of cloud computing. [14]
- 2. Define cloud computing. Also explain how it works?
- 3. Explain Full Virtualization and Para Virtualization in detail.
- 4. List and explain Benefits of SaaS.
- 5. List Paas Issues and Advantages.
- 6. Explain Paas System Types and PaaS Types.
- 7. List and explain any two database storage provider Applications.
- 8. List and explain Benefits and obstacles of SAAS.
- 9. List vendors who offer cloud services. Explain any two in details.

Q-3 Answer the following questions:

[A] What is Cloud Computing? Also Explain working models of Cloud Computing. [06]

[B] Write a note on Types of Clouds. [06]

OR

[B] Explain Components of Cloud computing. [06]

Q-4 Answer the following questions:

[A] Write a note on Cloud Computing Service models. [06]

[B] Write a note on E-Learning SaaS. [06]

OR

[B] List and explain any two database storage provider Applications. [06]

Q-5 Answer the following questions:

[A] Write a note on Cloud Collaboration. [06]

[B] Write a note on characteristics of PaaS model. [06]

OR

[B] Write a note on architecture of PaaS software with key actors. [06]

Q-6 Answer the following questions:

[A] List and explain key selection criteria for appropriate cloud implementation. [06]

[B] List and explain PaaS Providers. [06]

OR

[B] Write a note on deployment steps for an application on cloud. [06]

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SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

M.Sc. (Mobile Technology & Applications)

External Examination - Nov, 2017

SEMESTER- III

PS03EMTA02 - (Advanced Web Programming)

Date: 13/11/2017 (Monday)

Time: 2:00 p.m. to 5:00 p.m.

Maximum Marks: [70]

Q-1 Choose the most appropriate option for each question.

[08]

1. True or False. Modernizer is an open source.
2.

```
<video controls="controls" preload="none">  
<source src="song.mp4" type="video/mp4" />  
</video>
```

Which of the following is true?

 - A. It should load the entire video when the page loads.
 - B. It should load only metadata when the page loads.
 - C. It should load the part of video when the page loads.
 - D. It should not load the video when the page loads.
3. Which of the following is not new feature of HTML5?
 - A. Use <canvas> element for 2D drawing.
 - B. Use <video> elements for media playback.
 - C. Use <audio> elements for media playback.
 - D. Support for local storage
4. The HTML5 element is used to draw graphics via scripting is
 - A. <figcaption>
 - B. <mark>
 - C. <canvas>
 - D. <header>
5. _____ are video container format.
 - A. MPEG-4. (.mp4)
 - B. Ogg (.ogg)
 - C. Flash Video (.flv)
 - D. All of the above.
6. The network section in cache manifest has a single line, which contains just a single character _____.
 - A. (%)
 - B. (/)
 - C. (*)
 - D. None of the above.
7. Which one is correct input type in Opera browser?
 - A. type="date"
 - B. type="datetime-local"
 - C. type = "datetime"
 - D. All of the above.
8. Which of the following is not new element of HTML5?
 - A. <article>
 - B. <aside>
 - C. <command>
 - D. <big>

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- Q-2 Answer the following questions (Any Seven)** [14]
1. What is HTML5? List some new features of HTML5.
 2. Differentiate <Video> and <VideoFormat> element of HTML5.
 3. List and explain Input Types in HTML5.
 4. Explain the purpose of below tags in HTML5.
[1] Article [2] Navigation
 5. Explain Dates and Times markup element with snippet code.
 6. List HTML5 newly introduced Tags (Elements).
 7. Write a short note on use of Gradients in canvas.
 8. Explain character encoding under <head> element.
 9. What are unknown elements? How do browsers handle unknown elements?
- Q-3 Answer the following questions:**
- [A] Write a note on Modernizr: An HTML5 detection Library. [06]
- [B] Write a note on Friends and (Link) Relations in HTML5. [06]
- OR**
- [B] List New Semantic elements in HTML5. Explain any Two in details. [06]
- Q-4 Answer the following questions:**
- [A] Define Canvas. Write a note on use of Images in canvas. [06]
- [B] Write a note on Video Containers. [06]
- OR**
- [B] Write a note on use of Paths and Text in canvas. [06]
- Q-5 Answer the following questions:**
- [A] Write a note on HTML5 Storage. [06]
- [B] Write a short note on Geolocation API. [06]
- OR**
- [B] List and explain Audio Codec in detail [06]
- Q-6 Answer the following questions:**
- [A] Write a note on Offline Web Applications. [06]
- [B] Write a note on Email Addresses and Web Addresses input type form elements in HTML5. [06]
- OR**
- [B] Write a note on Number As a Slider and Date Pickers input type form elements in HTML5. [06]

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