

Department of Computer Science & Engineering
Mobile Apps Development (CSEB360IT)

MST-1

Roll No.....12101230

Time: 1hr

B. Tech -6th Sem

MM: 15

Note- Section-A is compulsory having one marks each and attempt any two questions from Section-B having 5 marks each.

SECTION-A

1. Explain disadvantages of web app development approach.
2. What is need of core libraries in android architecture?
3. Explain the meaning of onCreate() call back function.
4. Why are the threads important in android system?
5. Explain the situation in which implicit intent is required?

SECTION-B

6. What do you mean by activity, explain activity life cycle in detail.(5) ✓
7. a) What is the significance of the term 'interaction among activities'? (2.5)
b) Public class Myservice extends Service {
 }
 What is the meaning of above code? (2.5)
8. a) Explain with example the need and significance of Async tasks. (2.5)
b) What do you mean by middleware & protocols in mobile app development, Explain with example (2.5)

↳ not same

Sec-A (Each question is compulsory and carries 1 mark)

1. What is the role of pre-processor in compilation of a code?
2. Define the concept of handle by giving an example.
3. Which type of parser uses stack for processing the string?
4. Define Symbol table.
5. What is the purpose of YACC.

Sec-B (Attempt any two questions each carrying 5 marks)

6. Let G be a grammar for which production rules are given below:

$S \rightarrow cABd$

$A \rightarrow ab|a$

$B \rightarrow b$

Derive the string $W=cabd$ using the above grammar and construct the parse tree using top down approach.

7. Explain various phases of compiler by giving suitable example.
8. Describe the tools that can be used for construction of a compiler.

$S \rightarrow cABd$
 $A \rightarrow ab|a$
 $B \rightarrow b$

Department of Computer Science & Engineering, Punjabi University, Patiala

MST-1

B.Tech-6th Sem (CSE)

MM: 15

Time: 1 hour

Computer Graphics

Note: Q1 is Compulsory, each part carrying 1 mark. Attempt any two questions from Q2, Q3 and Q4, each question carries 5 marks.

Q1. Define a) Persistence Level b) Refresh Rate c) Disadvantage of DDA d) Retracing e) Mid-Point for Circle Drawing

Q2. Write down and explain the Mid-Point Circle Drawing Algorithm with the help of an example.

Q3. Explain in detail about the working of CRT Display.

Q4. What are the different types of 2D transformations? Write transformation matrices for them and give example(s).

Department of Computer Science and Engineering

Punjabi University, Patiala

Dr. Harmandeep Singh

MST-1 (B.Tech 6th Semester)

Dr. Gurjit Singh Bhathal

Cloud Computing (CSEB3604T)

Marks: 15

Times: 1 Hr.

Note: Question 1 is compulsory. Attempt total three question each carries 5 marks.

- 1) Explain the Following Terms:
 - a) Everything-as-Service (XaaS)
 - b) Elasticity v/s Scalability
 - c) Virtualization Security
 - d) Hypervisor and its types
 - e) Essential Characteristics of Cloud
- 2) Differentiate between distributed vs parallel computing and utility vs cloud computing.
- 3) What are the different cloud deployment models? Discuss in details
- 4) What are the different cloud service models? Discuss in details

CSEB3601T; Machine Learning

Time Allowed: 60 Minutes

Date: 01-03-2024

MST-I
Max. Marks: 15

Note: Section A is compulsory. Attempt *any two* questions from Section-B.

SECTION-A

- Q1
- i) Discuss the key components involved in designing a learning system. 1
 - ii) Define handwriting recognition problem as a well-posed learning problem. 1
 - iii) Define the concept of a cost function and its role in the context of regression models. 1
 - iv) Discuss various issues in machine learning. 1
 - v) Write down the python statement using sklearn to split a dataset into training set and testing set such that 30% of the data is used for testing. 1

SECTION-B

- Q2. Explain why feature scaling is necessary for machine learning algorithms. Explain the processes of standardization and normalization. Also, write python code to perform standardization on the features of a dataset using scikit-learn library. 5
- Q3. Using scikit-learn library, discuss various ways to handle categorical attributes. 5
- Q4. You are working for a ride-sharing company and are tasked with predicting the duration of a ride based on various factors such as distance traveled, time of day, weather conditions, and traffic congestion. The goal is to provide accurate estimates of ride durations to both drivers and passengers to improve user experience. 5
- In this scenario, would you classify the problem as a regression or classification task, and why? Based on the task, determine whether linear regression or logistic regression should be used for this prediction task, and justify your choice. Finally, outline the various steps involved in implementing the chosen algorithm.
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