ASP.NET & C#

UNIT I:

1. What is the .NET framework? (10/08/2023)
2. Difference between website and web application. (11/08/2023)
3. Explain Visual Studio IDE with menus. (Solution explorer & it's options, menu bar, code editor window) (18/08/2023)

UNIT II:

1. Explain the features of C#.NET programming. (17/08/2023)
2. Describe control statements in C#.
   [if, nested if, if-else, if-else ladder, switch statement, for loop, nested for loop, while, do-while (flowcharts optional)]
   (22/08/2023)
3. Describe the operators and namespaces in C#.
   (28/08/2023)
4. Explain classes and objects in C# with a minimum of 2 programs.
   [1st one is related to initializing and displaying data through methods. The 2nd is related to having the Main() method in another class.]
   (28/08/2023)
5. What is a namespace? Explain with suitable examples.
   (31/08/2023)
6. Explain for each loop with examples.
   (01/09/2023)

IMP:

7. Describe a master page with proper examples using user controls.
   (07/09/2023)
8. Describe event handling in C#.
   (07/09/2023)
9. Describe exception handling in C#.
   (07/09/2023)

10. Describe how to navigate among web pages.
    (07/09/2023)
11. What is web config, global.asax?
    (07/09/2023)

UNIT III:

1. Explain ASP.NET Page Life Cycle with its events and diagram.*
   (25/09/2023)
2. Explain Validation Controls in ASP.NET.
   (25/09/2023)
3. Explain Standard Controls in ASP.NET.
   (25/09/2023)
4. Describe state management in ASP.NET.
   (26/09/2023)

UNIT IV:

1. Describe ADO.Net Framework Data Provider objects.
   Also describe data provider for SqlServer, Oracle.
   (12/10/2023)
2. Explain CRUD operations in ASP.NET & C#
   [Create database and table.
   Create ASP.NET web application.
   Define model.]
   (26/10/2023)

3. Explain DataSet and DataAdapter in ASP.NET & C#.
   (26/10/2023)

4. What is GridView in C#?
   (28/10/2023)

UNIT V:

1. Explain AJAX architecture with diagram, describe components. (28/10/2023)

E-Governance

UNIT I:

1. Difference between eGovernment and eGovernance. (10/08/2023)
2. Key components of eGovernment and eGovernance. (10/08/2023)
3. Role of ICTs in eGovernance. (17/08/2023)
4. Stages of eGovernance and government initiatives. (18/08/2023)
5. NeGP. (18/08/2023)
6. Mission Mode Projects. (18/08/2023)

UNIT II:

1. eGovernance models OR Pillars of eGovernance. (17/08/2023)
2. Categories of eGovernance. (17/08/2023)
3. Key issues of eGovernance. (17/08/2023)
4. Infrastructure in eGovernance. (31/08/2023)
5. Describe Digital eGovernance models: (07/09/2023)
   (All 5 models are important from exam POV)
   [Expected: Description, Diagram, Applications, Merits, Demerits]
   i. Broadcasting Model or Wider Dissemination Model.
   ii. Comparative Analysis Model.

UNIT III:

1. What are public grievances in eGovernance? (12/10/2023)

2. Explain public grievances in eGovernance [telephone, ration card, transportation, rural services, land record]
   (12/10/2023)

UNIT IV:

1. Explain stages in evolution and strategies for success in E-Gov.
   (26/10/2023)

Adv. Java

UNIT I:

Assignment I: (**Submission Date:** 04/09/2023)

1. Define the OSI Models with protocols. (17/08/2023)
2. Explain the OOPS concepts in Java. (17/08/2023)
3. State and explain socket programming along with the three internet sockets. (Explain host, client, server, TCP and other things.)
   (17/08/2023)
4. Describe RMI and explain features. (24/08/2023)
5. Define a distributed computing system. (24/08/2023)

IMP: (NOT in assignment)

6. Difference between IPv4 and IPv6. (17/08/2023)

UNIT II:

Assignment No. 2

1. What is a servlet? Describe the life cycle of servlets with an example.
(11/09/2023)

2. Write short notes on: (11/09/2023)
a. Server side programming
b. Deployment descriptor
c. Server side include
d. Servlet chaining

3. Write differences between: (5 points) (11/09/2023)
a. servlets and CGI
b. Forward and send redirect()
c. ServletConfig vs ServletContext

4. Which are the session tracking techniques used in java programming language?
(20/09/2023)

5. Explain Delegation Event Model used for event handling in java.
(20/09/2023)

Mobile Technology

UNIT I:

Assignment No. 1:

1. Explain the functioning of a cellular network. How the given setup frequencies are used to increase capacity of a network? (22/08/2023)
2. Explain the differences between 1G, 2G, 3G, 4G and 5G mobile communication. (22/08/2023)
3. Describe a noble application of a mobile device that fascinates you. What are the additional software components used in this application? (22/08/2023)
4. Explain GSM architecture along with its sub-systems. (22/08/2023)
5. Describe the 3-tier mobile communication architecture in detail. (25/08/2023)

UNIT III: (04/10/2023)

Build an Android application using Android Studio and Emulator.

Cloud Computing:

UNIT-I:
Tutorial No. 1 / Assignment No. 1:

1. Differentiate between Distributed and Grid Computing.
2. What is multitenant architecture?
3. Write short note on:
    a. Virtualization
    b. Web 2.0
4. Explain types of Cloud Computing.
5. Explain benefits and limitations of Cloud Computing.

UNIT-II:
Tutorial No. 2 / Assignment No. 2: (05/10/2023)

1. Explain the working of GMS and HDFS in CC.
2. What is the task of a name/master node?
3. What is the task of a data node?
4. What is a secondary name node?
5. Explain in detail about the cloud file system.
6. What are the general security measures/advantages of cloud based solutions?

UNIT III:

1. Explain Implementation Levels of Virtualization with diagram. (19/10/2023)

***CC practical exam questions**
(30/10/2023)

1. Describe services of AWS.
2. Difference between Git and GitHub.
3. Write down the installation of Ubuntu through .iso file/virtual box.
4. Draw and explain the implementation level of cloud computing.
5. Implementation of SOAP web service in C# / Java.
6. Distinguish between Hypervisor 1 and Hypervisor 2.
7. Reference model of Cloud Computing.
8. Explain the types of deploying(public, private, hybrid) and accessing CC models.

UNIT V: (30/10/2023)

*1. Enlist some applications and their uses in E-commerce and E-governance. (Set A)

*2. Enlist an application of CC used in scientific and geoscience applications. (Set B)

*3. Explain Git and GitHub in detail.