AGJ 1st half (i) 72

Con. 3982-12. **(REVISED COURSE)** **GN–7574**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.

(2) Attempt any **four** questions out of the remaining **six** questions.

1. (a) Explain REST architecture and give its design constraints. 10

 (b) Explain the working of File Transfer Protocol (FTP) with suitable diagrams. 10

2. (a) Compare SOA and ROA. (Service Oriented Architecture and Resource Oriented Architecture). 10

 (b) Discuss various security issues in cloud. 10

3. (a) What is RSS ? Explain its advantages. 10

 (b) Describe IPV_6 (Internet Protocol Version 6) and state its differences over IPV_4. 10

4. (a) Disucss "Cloud Computing". What are the different types of cloud services ? Explain. 10

 (b) Explain the working of Search Engine. 10

5. (a) Discuss the working of DHCP (Dynamic Host Configuration Protocol) and give its Packet Format. 10

 (b) Describe various client and server side Vulnerabilities. 10

6. (a) Explain SOA with its life cycle. 10

 (b) Describe various deployment techniques in cloud computing. 10

7. Write short notes on :– 20

 (a) Public Key Infrastructure (PKI)

 (b) Google Apps Engine

 (c) VOIP

 (d) HTML 5·0.

Con. 3703-12.

GN-7565

(REVISED COURSE)

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. **1** is **compulsory**.
    (2) Solve any **four** questions from the remaining **six** questions.
    (3) Assume **suitable data** wherever **required**.

1. (a) What is Multimedia animation ?   5
   (b) Explain elements of multimedia systems.   5
   (c) Compare MPEG with H.264.   5
   (d) Explain effective HCI.   5

2. (a) Describe the algorithms for the CCITT group 3 standards. How does CCITT   10
    Group 4 differs from CCITT Group 3 ?
   (b) Explain in brief various parts and the set of visual descriptors in MPEG-7.   10

3. (a) Explain RIFF and write the pseudo code for the file extension WAV, RMI,   10
    RDI, PAL for RIFF file format.
   (b) Explain JPEG Methodology. Compare it with JPEG 2000.   10

4. (a) Explain MIDI Devices. Distinguish between channel messages and system   10
    messages giving example.
   (b) Explain multimedia system architecture.   10

5. (a) Explain ADPCM in speech coding scheme.   10
   (b) Write short note on Copyright and methods of licensing for multimedia.   10

6. (a) Explain Multimedia authoring system design issues and its types.   10
   (b) List and explain the factors consider designing multimedia systems which   10
    provide virtual reality functionality.

7. Write short notes on :—
    (a) Distributed Multimedia Systems   10
    (b) Storage Requirements.   10

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Con. 4452-12.   (REVISED COURSE)   **GN–8270**

(3 Hours)   [Total Marks : 100

N.B.   (1) Question No. **1** is **compulsory**.
　　　　(2) Attempt any **four** questions, out of **remaining** questions.
　　　　(3) **All** questions carry **equal** marks.
　　　　(4) Draw **neat** diagram wherever **required.**

1. (a) Explain Distributed computing systems models with diagram.   **10**
　　(b) Explain desirable features of a good distributed file system.   **10**

2. (a) Compare and contrast Mutual Exclusion Algorithms.   **10**
　　(b) Explain Failure handling in message passing.   **10**

3. (a) Discuss the Issues in designing Load-balancing algorithm.**10**
　　(b) Explain communication protocols for RPC.**10**

4. (a) Explain Stateful file servers and Stateless file servers and its advantages. **10**
　　(b) Write a note on Group communication.   **10**

5. (a) Write a note on System oriented names and Human oriented names   **.10**
　　(b) Explain the different distributed physical clock synchronization algorithms
　　　　with their relative advantages and disadvantages.   **10**

6. (a) Explain various consistency models in DSM.   **10**
　　(b) Explain RPC implementation mechanism.   **10**

7. Write short notes on : (any **four**)   **20**
　　(a) Thrashing
　　(b) Token ring algorithm
　　(c) DCOM
　　(d) File – Caching schemes
　　(e) Process migration
　　(f) Naming and security

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20 : 1st half-12-(j)JP

Con. 3983-12.   (REVISED COURSE)   GN–7572

(3 Hours)   [Total Marks : 100]

N.B. (1) Question No. 1 is **compulsory**.
　　　(2) Attempt any **four** questions out of **remaining**.
　　　(3) **Figures** to the right indicate **full** marks.
　　　(4) Assume **suitable** data wherever **required** and justify the **same**.

1. (a) Explain principles of user interface.   5
　　(b) Explain various types of statistical graphics in brief.   5
　　(c) Explain influence on icon usability.   5
　　(d) Explain various types of messages   5

2. (a) Explain the difference between proper menu design and poor menu design with   10
　　　　diagrams.
　　(b) Explain following techniques in determining requirements. Categorize them as   10
　　　　direct or indirect method.
　　　　　(i)　Electronic survey
　　　　　(ii)　Card sorting
　　　　　(iii)　Facilitated Team Workshop
　　　　　(iv)　Trade Show.

3. (a) Explain various New and Navigation schemes selection of window with example.   10
　　(b) What are mental models and why are they important in interface design ?   10

4. (a) Explain various Colar models. Explain various considerations for choosing   10
　　　　background and foreground color for web page.
　　(b) Explain proper device based and screen based controls.   10

5. (a) What are Pointing devices ? What tasks and explain about direct control pointing   10
　　　　devices.
　　(b) What are human considerations in sources design ? Also explain organizing   10
　　　　screen elements, ordering of screen data and contents.

6. (a) Explain various interface building tools.   10
　　(b) Differentiate between Graphical User interface and Web Page design.   10

7. Write short notes on :— (Any **two**)   20
　　　　(a) Speech recognition digitization and generation
　　　　(b) Designing for visually impaired
　　　　(c) Software tools and specification methods
　　　　(d) Designing process to understand business junctions.

VT-F.H.Exam. April.-12-125

Con. 3634-12.   **(REVISED COURSE)**   **GN-7418**

(3 Hours)   [**Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
     (2) Solve any **four** questions from **remaining**.
     (3) Assume **suitable** data wherever **necessary**.

1. Design Domain-Specific Software Architecture (DSSA). For the Theater Ticket Management system. Assume suitable entities, attributes etc. Domain model must consists following :–
    (a) Domain Dictionary and Information Model,   10
    (b) Feature Model and Operational Model.   10

2. (a) Explain with a suitable example the event type connector and its variation 10
        dimensions.
    (b) Define the following terminology :–   10
         (i) Configuration
         (ii) Architectural style
         (iii) Architectural patterns
         (iv) Accuracy and precision
         (v) Views and viewpoints.

3. **(a)** Define Architectural analysis. Discuss various analysis goals with an   10
        example ?
    (b) Explain with an example stakeholder driven modeling.   10

4. (a) Explain various designing issues for following non-functional properties :–   10
         (i) Efficiency and Complexity
         (ii) Scalability and Hetrogeneity.
    (b) Discuss Service-Oriented Architectures (SOA) and Web Services.   10

5. (a) Explain with the help of suitable diagram Architectural Trade-off Analysis Method 10
        (ATAM).
    (b) Explain the existing frameworks for the pipe-and-filter and C2 Architectural style. 10

6. (a) Discuss an Architectural Conception in Abscence of Experience.   10
    (b) Explain with an example Software System Mobility and Architecture.   10

7. Write short note on (any **two**) :–   20
    (a) Decentralized Architectures
    (b) REST
    (c) Software Architecture and Deployment
    (d) Lightweight C2 Framework.

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