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Seat No.	

B.E. (CSE) (Part - I) (Semester - VII) (Revised) Examination, December - 2015

ADVANCED COMPUTER ARCHITECTURE

Sub. Code : 47917

Day and Date : Tuesday, 08 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 1.00 p.m.

Instructions : 1) Attempt any three questions from each section.

2) Figures to the right indicates full marks.

3) Assume suitable data if necessary.

SECTION - I

Q1) a) Explain following performance measures of Computer Systems. **[8]**

i) MIPS Rate

ii) Through put Rate

b) Explain how classification of various computer architecture is done based on notions. **[8]**

Q2) a) Distinguish among following computer technologies. **[8]**

i) Uniprocessor System versus multiprocessor systems.

ii) Parallelism versus pipelining.

b) Explain principle of linear pipelining using space time diagram. What is need of latches between two pipeline stages? **[8]**

Q3) a) What is memory bandwidth? Explain S-access memory organization using timing diagram. **[8]**

b) Why associative memories are called as content addressable memories? State it's advantages over RAM. **[8]**

P.T.O.

Q4) Write short notes on following (any three) : **[3 × 6 = 18]**

a) Vector instructions.

b) Scalar Vs Vector pipelines.

c) Cm * Architecture.

d) Systolic arrays.

SECTION - II

Q5) a) What is data driven computation? How is different from conventional computation? **[8]**

b) Draw and explain static dataflow computer organization. **[8]**

Q6) a) What are Bernstein's conditions? Explain how parallelism in a program is analyzed using it? **[8]**

b) What is latency? Explain prefetching type latency hiding technique. **[8]**

Q7) a) What are different types of data dependencies? Draw data dependence graph for the following code fragment. **[8]**

i) Load R1,A

ii) Add R2, R1

iii) Move R1, R2

iv) Store B, R1

b) Explain different language features for parallelism. **[8]**

Q8) Write short notes on following any three : **[3 × 6 = 18]**

a) Optimizing compilers for parallelism.

b) Object oriented model.

c) Static connection networks.

d) Hardware and Software parallelism.

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Total No. of Pages : 2

Seat No.	

B.E. (CSE) (Semester - VII) (Revised) Examination, December - 2015

ADVANCED DATABASE SYSTEMS

Sub. Code : 47919

Day and Date : Saturday, 19 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 1.00 p.m.

Instructions : 1) Attempt any three questions from each section.

2) Figures to right indicate full marks.

3) Assume suitable data wherever necessary.

SECTION - I

Q1) a) State the two important properties of Identity of an object and its implementation. [8]

b) What is difference between transient object and persistent object? Explain any two mechanisms for making the objects persistent. [8]

Q2) a) Describe the design of ORDBMS with an example. [8]

b) Compare RDBMS with ORDBMS. [8]

Q3) a) Describe ZPC in a distributed environment. [8]

b) Explain the use of XML for exchange of data.

Q4) Write short notes on (any three) : [18]

a) OQL

b) Type hierarchies.

c) Parallel join.

d) XML schema.

P.T.O.

SECTION - II

Q5) a) List the three ways in which DBA can time a database and explain tuning of schema and transactions. [8]

b) What is E-commerce? State atleast 5 activities wherein databases are used extensively to support these activities. [8]

Q6) a) What do you mean by reverse engineering as applied to legacy systems. Explain big-bang approach & chicken-little approach. [8]

b) State and briefly explain various issues in data-server systems used in LAN.

Q7) a) What is cross-tab? Is cross-tab different than relational table? With an illustration, explain the use of values "all" and "null" in cross tabulation. [8]

b) What is a data warehouse? Explain with necessary figures the components of a datawarehouse. [8]

Q8) Write short notes on (any three) : [18]

a) Main memory database.

b) Association rules of datamining.

c) Synonyms and Homonyms.

d) Order settlement.

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Total No. of Pages : 2

Seat No.	

B.E. (CSE) (Semester - VII) (Revised) Examination, December - 2015

CYBER LAWS (Elective - I)

Sub. Code : 47923

Day and Date : Thursday, 17 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions : 1) Attempt any three questions from each section.

2) Figures to the right indicate full marks.

3) Assume suitable data wherever necessary.

SECTION - I

Q1) a) Explain the scope of the IT Act. 2000. [8]

b) Explain the legal recognition of Digital Signatures. [8]

Q2) a) Explain the legal recognition of electronic records as per IT Act. 2000. [8]

b) Describe the use of digital signatures in Government and its agencies. [8]

Q3) a) What is Certifying Authority? State the functions of the Controller of CA. [8]

b) Explain the power of search and seizure of controller of CA. [8]

Q4) Write short notes on : [6+6+6]

a) Issues in preparing legal rules for e-data interchange.

b) Authenticity of electronic records.

c) Functioning of Certifying Authority.

P.T.O

SECTION - II

Q5) a) Explain the seven generic top level domain names. **[8]**

b) Explain the dispactes similarity of the mark with the registered mark and dilution of Trademark. **[8]**

Q6) a) Explain framing and spamming. State the various suggestions to prevent Junk e-mails. **[8]**

b) In case of cybersquatting, specify non-exchusive tests to determine bad faith. **[8]**

Q7) a) Explain the role of RBI in payment systems. **[8]**

b) What do you mean by publishing of information which is obscene in electronic form. State the punishments made there under. **[8]**

Q8) Write short note on : **[6+6+6]**

a) Reverse Hijacking

b) Brcach of confidentiality & privacy

c) Credit card laws

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Total No. of Pages : 2

Seat No.	

B.E. (CSE) (Part - IV) (Semester - VII) (Revised) Examination, December - 2015

PROJECT MANAGEMENT

Sub. Code : 47922

Day and Date : Thursday, 17 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions : 1) Attempt any three questions from each section.

2) Assume suitable data if necessary. Draw diagrams and suitable examples, wherever necessary.

3) Figures to the right indicate full marks.

SECTION - I

Q1) a) Describe briefly the concept of project management process groups. **[8]**

b) Explain the four frames of organizations. **[8]**

Q2) a) Explain the process "Integrated Change Control". **[8]**

b) Explain the process of scope control. How it can be used to prevent scope creep. **[8]**

Q3) a) Consider the following table **[8]**

Activity	Initial Node	Final Node	Estimated Duration
A	1	2	2
B	2	3	2
C	2	4	3
D	2	5	4
E	3	6	2
F	4	6	3
G	5	7	6
H	6	8	2
I	6	7	5
J	7	8	1
K	8	9	2

P.T.O

The project start date is 01/07/2014

i) Draw the AOA diagram and calculate the critical path.

ii) When will be the project completed at the earliest?

b) Explain in detail earned value management technique. **[8]**

Q4) Write short notes (Any three) : **[3 × 6 = 18]**

a) Critical Chain Scheduling

b) WBS

c) Project management certifications

d) Return on Investment (ROI) method

e) Cost overrun

SECTION - II

Q5) a) Explain in detail the process 'quality planning'. **[8]**

b) Explain Tuckman model of team development. **[8]**

Q6) a) List and elaborate the suggestions for improving project communications. **[8]**

b) Explain in detail tools and techniques for risk Identification. **[8]**

Q7) a) List the reason organizations outsource. Why the trend of outsourcing is growing? **[8]**

b) Explain the terms : **[8]**

i) Responsibility assignment matrix (RAM)

ii) Resource Histogram

Q8) Write short notes (Any three) : **[3 × 6 = 18]**

a) Control charts and seven run rule

b) ISO standards for quality

c) Make or buy analysis

d) Choosing suitable media for information distribution

e) Simulation

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Total No. of Pages : 2

Seat No.	

B.E. (Computer Science & Engineering)Examination, December - 2015

INTRODUCTION TO MAINFRAMES

Sub. Code : 58286

Day and Date : Thursday, 03 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions : 1) Figures to the right indicate full marks.

2) Attempt any three questions from each section.

3) Question no 4 and 8 is compulsory.

SECTION - I

Q1) a) Explain Online and Batch processing with its applications. **[8]**

b) What do you mean by instream and cataloged procedures. **[8]**

Q2) a) What is dataset? Explain different types VSAM datasets. **[8]**

b) What is EXEC statement? Explain it with example. **[8]**

Q3) a) Explain z/OS with its features. **[8]**

b) Explain following IBM utility programs. **[8]**

i) IEBCOPY

ii) IEHPROGM

Q4) Write short note on (Any Three) : **[18]**

a) DD statement

b) MVS address space

c) CATLOG

d) DASD

P.T.O

SECTION - II

Q5) a) List and explain the Divisions in COBOL program. **[8]**

b) Explain IF statement in COBOL with example. **[8]**

Q6) a) What is the use of EVALUATE statement? Give and explain different forms of EVALUATE statement. **[8]**

b) Write a sample COBOL program where all types of PERFORM verbs are used. **[8]**

Q7) a) What is optimizer in DB2? Explain the working of optimizer. **[8]**

b) Explain System Service Component & Locking Service Component of DB2. **[8]**

Q8) Write short note on (Any Three) : **[18]**

a) DB2 CATLOG and DIRECTORY

b) USAGE Clause

c) REDEFINE Clause

d) DB2 structure and components.

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Total No. of Pages : 2

B.E. (Computer Science and Engineering) (Part - II) (Semester - VIII)

Examination, November - 2015

GRID TECHNOLOGY

Sub. Code : 49447

Day and Date : Monday, 30 - 11 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions :
1) **Q.4 & Q.8 are compulsory.**
2) **Attempt any two questions from Q.1, Q.2, Q.3.**
3) **Attempt any two questions from Q.5, Q.6, Q7.**
4) **Figures to the right indicates full marks.**

SECTION - I

Q1) a) Explain OGSA with service instance semantics, service data semantics and OGSA port Types. **[8]**

b) Draw basic structure of GT3 and explain base service resource management. **[8]**

Q2) a) Explain semantic activities with following: **[8]**

i) Ontology based grid resource matching.

ii) Semantic workflow registration and discovery in mygrid.

b) With neat schematic explain structure of Portlet Wrapper generator? **[8]**

Q3) a) With schematic explain J2EE and Apache axis framework for invoking Web service. **[8]**

b) Explain OGSA-DAI port Types and OGSA-DAI functionality. **[8]**

P.T.O.

Q4) Write a short note on (Any Three): **[18]**

a) Topologies and types of grid.

b) DAML-S and OWL-S.

c) Autonomic computing.

d) CORBA.

SECTION - II

Q5) a) With neat schematic explain Grid monitoring architecture. **[8]**

b) With neat schematic explain different daemons in condor pool. **[8]**

Q6) a) Explain the architecture of autopilot. **[8]**

b) What is cloud computing? What are the benefits and limitations of CC? Explain different security issues in cloud environment. **[8]**

Q7) a) What is virtualization? What are the types of virtualization? Explain storage virtualization? **[8]**

b) What is Desktop as a service? How desktop manages in cloud environment? **[8]**

Q8) Write a short note on (Any Three): **[18]**

a) GSI.

b) Resource discovery and Resource selection in scheduling.

c) Delivery models of cloud computing.

d) Job life cycle and Job management in condor.

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Total No. of Pages : 2

Seat No.	

B.E. (CSE) (Part - IV) (Revised) (Semester - VIII) Examination, December - 2015

STORAGE NETWORKS

Sub. Code : 49448

Day and Date : Tuesday, 01 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions : 1) Attempt any three questions from each section.

2) Figures to the right indicate full marks.

SECTION - I

Q1) a) What are the different components of disk drive? **[8]**

b) Explain different services provided by FC-3 of Fibre Channel Protocol Stack. **[8]**

Q2) a) Explain fundamental laws governing disk performance. **[8]**

b) Explain RAID Level 6 with diagram. Find write penalty for RAID Level 6. **[8]**

Q3) a) Explain SCSI-3 architecture with diagram. **[8]**

b) Compare RAID 0+1 and RAID 1+0 **[8]**

Q4) Write note on : **[18]**

a) Storage Infrastructure Management Activities.

b) Importance of Cache in Intelligent Storage Systems.

c) Interconnecting Devices used in SAN.

P.T.O

SECTION - II

Q5) a) Explain different protocols used for file sharing in NAS. **[8]**

b) Explain local replication technologies. **[8]**

Q6) a) Explain Business Impact Analysis and BC Technology Solutions to recover from failure. **[8]**

b) Explain Restore and Restart Considerations. **[8]**

Q7) a) Explain Asymmetric Storage Virtualization in Network with advantages and disadvantages. **[8]**

b) Explain different categories of backup based on granularity. **[8]**

Q8) Write short note : **[18]**

a) Explain Shared Disk File Systems.

b) Objectives of virtualisation.

c) Recovery-Point Objective (RPO) and Recovery-Time Objective (RTO)

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Total No. of Pages : 2

Seat No.	

B.E. (Computer Science & Engineering) (Semester - VIII) (New Course) Examination, December - 2015

BUSINESS INTELLIGENCE SYSTEM (Elective - II)

Sub. Code : 49453

Day and Date : Thursday, 03 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 1.00 p.m.

Instructions : 1) Answer any three questions from each section.

2) Answer to both the sections must be written in the same answer book.

3) Figures to the right indicate marks.

4) Draw neat diagrams and suitable example wherever necessary.

SECTTON - I

Q1) a) Discuss back room system architecture model with diagram. [9]

b) Explain infrastructure requirement for front room. [8]

Q2) a) List and explain any four dimensional modelling primer. [8]

b) Explain establish naming conventions. [8]

Q3) a) Explain dimensional modelling process flow diagram. [9]

b) Explain conformed dimensions. [8]

Q4) a) Discuss the value of metadata integration. [8]

b) Discuss the profile and select the data source. [8]

P.T.O.

SECTION - II

Q5)	a)	Describe four major requirement areas of the ETL System.	[9]
	b)	Explain Surrogate key pipeline.	[8]
Q6)	a)	Explain operational business intelligence with example.	[8]
	b)	What are the roles of BI application developer and who does the BI application job?	[9]
Q7)	a)	Explain navigating application via BI portal.	[8]
	b)	Explain simple application navigation framework.	[8]
Q8)	a)	Explain Query formulation.	[8]
	b)	Explain audit dimension assembler.	[8]

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Total No. of Pages : 2

Seat No.	

B.E. (Computer Science & Engineering)Examination, December - 2015

INTRODUCTION TO MAINFRAMES

Sub. Code : 58286

Day and Date : Thursday, 03 - 12 - 2015 **Total Marks : 100**

Time : 10.00 a.m. to 01.00 p.m.

Instructions : 1) Figures to the right indicate full marks.

2) Attempt any three questions from each section.

3) Question no 4 and 8 is compulsory.

SECTION - I

Q1) a) Explain Online and Batch processing with its applications. **[8]**

b) What do you mean by instream and cataloged procedures. **[8]**

Q2) a) What is dataset? Explain different types VSAM datasets. **[8]**

b) What is EXEC statement? Explain it with example. **[8]**

Q3) a) Explain z/OS with its features. **[8]**

b) Explain following IBM utility programs. **[8]**

i) IEBCOPY

ii) IEHPROGM

Q4) Write short note on (Any Three) : **[18]**

a) DD statement

b) MVS address space

c) CATLOG

d) DASD

P.T.O

SECTION - II

Q5) a) List and explain the Divisions in COBOL program. **[8]**

b) Explain IF statement in COBOL with example. **[8]**

Q6) a) What is the use of EVALUATE statement? Give and explain different forms of EVALUATE statement. **[8]**

b) Write a sample COBOL program where all types of PERFORM verbs are used. **[8]**

Q7) a) What is optimizer in DB2? Explain the working of optimizer. **[8]**

b) Explain System Service Component & Locking Service Component of DB2. **[8]**

Q8) Write short note on (Any Three) : **[18]**

a) DB2 CATLOG and DIRECTORY

b) USAGE Clause

c) REDEFINE Clause

d) DB2 structure and components.