

M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER

Branch: EEE(Computer Aided Power System)

PAPER : POWER SYSTEM DYNAMICS & STABILITY

Tim: 3 hours

Max.Marks: 60

Answer Any ONE question from each unit
All questions carry equal marks

UNIT-1

1. a) For a Single machine connected to an infinite bus through a transmission line, derive the criterion for the steady state stability. 6M
 b) A generator represented by a voltage source $1.0 \angle \delta$ p.u, with a reactance of 0.3 p.u. is connected to an infinite bus of $1.0 \angle 0^\circ$ through an external impedance of $0.1 + j 0.2$ p.u. If the received power is 1.0 PU, find the equilibrium values of δ 6M

OR

2. a) Explain the equal Area criterion for determining stability of a single Machine Infinite Bus System. 6M
 b) A Synchronous generator is delivering 1.0 PU power at 0.8 pf lagging through a CB to an infinite bus having a voltage of 1.0 PU. If the CB is opened how long it may be kept opened before being closed without loss of synchronism? Assume $x_g = 0.4$ PU, $H = 3.0$ secs and $f = 50$ Hz.. 6M

UNIT-II

3. a) Starting from the normal flux linkage equations, derive the transformed flux linkage equations using park transformation.. 6M
 b) Starting from the Voltage equations, derive the transformed voltage equations of the synchronous machine using park transformation 6M

OR

4. a) Analyse the steady stable performance of an unloaded generator as well as loaded generator using the transformed flux linking and voltage equations. 6M
 b) Explain how stator Base and Rotor Base quantities are chosen in a synchronous generator. 6M

UNIT-III

5. a) Draw the general functional block diagram of excitation control system and explain the function of each block.. 6M
 b) Draw the block diagram of IEEE Type 1 Excitation System and derive its State Equations. 6M

OR

[P.T.O.]

6. a) Derive the Transfer function of a separately excited DC generator exciter. 6M
b) Draw the block diagram of a static excitation system and derive its state equations. 6M

UNIT-IV

7. a) Derive the simplified stator equations of the synchronous machine used in the analysis of dynamic performance. 6M
b) Discuss the application of model 1.1 to stator equation and hence derive the equivalent circuit of stator. 6M

OR

8. a) Discuss the applications of model 1.1 to the network equations when the external network is a linear two port network. 6M
b) With the help of phasor Diagram, explain the procedure for the computation of initial conditions of the synchronous machine system equations. 6M

UNIT-V

9. a) Starting from the individual block diagrams, derive the overall block diagram of the synchronous generator in terms of constants $K_1, K_2 \dots K_6$. 6M
b) Neglecting the exciter time constant, derive the stability criterion for the synchronous machine from the characteristic equation. 6M

OR

10. a) Considering synchronous machine system without AVR, derive the stability criterion from the synchronizing and Damping Torque Analysis. 6M
b) Explain the function of power system stabilizer and the various control signals used as inputs to the stabilizer. 6M

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M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER
Branch: DECS
PAPER : WIRELESS COMMUNICATIONS

Tim: 3 hours

Max.Marks: 60

Answer Any ONE question from each unit
All questions carry equal marks

UNIT-1

1. a) Explain second generation cellular networks. 6M
b) Explain PAN 6M
- OR
2. a) Explain some wireless communication systems. 6M
b) Explain WLL. 6M

UNIT-II

3. a) Derive the expression for free space propagation. 6M
b) Explain types of small scale fading 6M
- OR
4. a) Explain large scale path loss in detail. 6M
b) Explain Rayleigh and Ricean distributions. 6M

UNIT-III

5. a) Explain space diversity in detail. 6M
b) Analyze the performance of Rayleigh fading channels. 6M
- OR
6. a) Explain maximal ratio combining in detail. 6M
b) Explain the concept of diversity branches. 6M

UNIT-IV

7. a) Explain spread spectrum multiple access technique. 6M
b) Derive the expression for capacity of cellular CDMA networks. 6M
- OR
8. a) Explain rake receiver. 6M
b) Explain Hard and Soft handoff strategies. 6M

UNIT-V

9. a) Explain frequency selective fading channels. 6M
b) Explain UMTS in detail. 6M
- OR
10. a) Explain 3G cellular systems. 6M
b) Explain MIMO GSM specifications. 6M

**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: CSE

PAPER : ADVANCED COMPUTER NETWORKING

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-I

1. (a) Compare OSI model with TCP/IP model? 6M
(b) What are IEEE standards for LAN/ 6M
- OR
2. (a) Explain ATM adaption layer and its sub layers? 6M
(b) Why does ATM uses small fixed length cells? 6M

UNIT-II

3. (a) Discuss the usefulness of redundancy in error detection and correction? 6M
(b) What is the maximum effect of 2 milliseconds burst of noise on data transmitted at a flow rate of 2000bps? 6M
- OR
4. (a) Explain the working of Go-Back-N-ARQ sliding window protocol? 6M
(b) How does the performance of stop and wait protocol is measured? 6M

UNIT-III

5. (a) What is IPv4 address? An IPv4 datagram has 1024 bytes? What is header length field value and total length field value? 6M
(b) Explain any two protocols that resolve the contention for the channel without collisions? 6M
- OR
6. (a) Explain how TCP deals with duplicate segments? 6M
(b) Explain retransmission policy of TCP? 6M

UNIT-IV

7. (a) Give ODS reference model and explain in detail? 6M
(b) Discuss the design issues of client server model? 6M
- OR
8. (a) Explain message passing mechanism in client server model? 6M
(b) Explain RPC and remote object invocation? 6M

UNIT-V

9. (a) What is a thread? How it differs from a process? 6M
(b) Explain concurrency control of threads? 6M
- OR
10. (a) Distinguish between public key and private key mechanisms? 6M
(b) Explain Kerberos protocol? 6M

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**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: CSE

PAPER : DATAMINING & WAREHOUSING

Time: 3 Hours

Max.Marks: 60

**Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.**

UNIT-I

- | | | | |
|----|-----|--|----|
| 1. | (a) | List out various functionalities of data mining? | 6M |
| | (b) | Give the classification of different data mining systems? | 6M |
| OR | | | |
| 2. | (a) | Discuss the major issues of data mining? | 6M |
| | (b) | Explain the features of multidimensional data cube technology? | 6M |

UNIT-II

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|----|-----|---|----|
| 3. | (a) | Explain majority types of concept hierarchies? | 6M |
| | (b) | List out the data mining primitives? | 6M |
| OR | | | |
| 4. | (a) | Explain different types of architectures of data mining system? | 6M |
| | (b) | Give the characteristics of knowledge to be mined? | 6M |

UNIT-III

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|----|-----|--|----|
| 5. | (a) | Explain class comparison methods and implementation? | 6M |
| | (b) | List out mining descriptive statistical measures in large databases? | 6M |
| OR | | | |
| 6. | (a) | Explain about presentation of class comparison descriptions? | 6M |
| | (b) | Briefly explain about quartiles, outliers and boxplots? | 6M |

UNIT-IV

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|----|-----|---|----|
| 7. | (a) | Discuss the issues regarding classification and prediction? | 6M |
| | (b) | Explain how classifier accuracy is measured? | 6M |
| OR | | | |
| 8. | (a) | Discuss classification using back propagation? | 6M |
| | (b) | Discuss classification by decision trees? | 6M |

UNIT-V

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|-----|-----|--|----|
| 9. | (a) | Give a brief note on major clustering methods? | 6M |
| | (b) | Explain density based clustering method? | 6M |
| OR | | | |
| 10. | (a) | Give a brief not on types of data in cluster analysis? | 6M |
| | (b) | Explain grid based clustering method? | 6M |

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M.TECH DEGREE EXAMINATION DECEMBER 2013**SECOND SEMESTER****Branch: EEE(Computer Aided Power System)****PAPER : FLEXIBLE AC TRANSMISSION SYSTEMS****Tim: 3 hours****Max.Marks: 60****Answer Any ONE question from each unit****All questions carry equal marks****UNIT-1**

1. a) Explain how power flow in parallel paths and in a meshed system can be controlled. 6M
- b) In a 2 bus system derive the expressions for active and reactive power flows in the line connecting the two buses and explain how they can be controlled. 6M
- OR
2. a) Explain the basic types of FACTS controllers. 6M
- b) Give a brief description and definitions of FACTS Controllers. 6M

UNIT-II

3. a) Prove that the ipoint shunt compensation increases the transmitted power through the line. 6M
- b) With the help of suitable diagrams, explain the principle of operations of a TCR. 6M
- OR
4. a) Explain how active power flow in a line can be controlled by series compensation. 6M
- b) With the help of suitable diagrams, explain the principle of operation of a TCSC.

UNIT-III

5. a) Explain the principle of power flow control by phase Angle Regulators. 6M
- b) With the help of neat diagrams explain the principle of operation of TCVR. 6M

OR

6. a) Draw the schematic diagram of TCPAR and explain its principle of operation. 6M
- b) Discuss the basic principle of switching convertor based voltage and phase angle regulators. 6M

UNIT-IV

7. a) With the help of circuit diagram explain the basic operating principle of an UPFC. 6M
- b) Derive the expressions for active and reactive power flows in a two bus system, as a function of injected voltage angle of UPFC. 6M

OR

[P.T.O.]

8. a) Explain the basic operating principle of an IPFC with the help of neat diagrams. 6M
b) Explain the practical applications of IPFC 6M

UNIT-V

9. a) Explain the basic concept of NGH –SSR Damping scheme. 6M
b) Discuss the Design and operation aspects of the above scheme. 6M

OR

10. a) Explain the basic concept of Thyristor controlled Braking Resistor. 6M
b) Discuss the Design and operation aspects of the above. 6M

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(12ECM202)

**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: DECS

PAPER : DIGITAL COMMUNICATION TECHNIQUES

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-1

1. a) Explain signal space concepts. 6M
b) Explain matched filter receiver. 6M

OR

2. a) Explain orthogonal expansion of signals. 6M
b) Explain memory less modulation methods. 6M

UNIT-II

3. a) Explain optimum receiver for M-ary orthogonal signals. Also explain the probability of error. 12M

OR

4. a) Explain Karhunen-Loève expansion approach. 6M
b) Explain optimum receiver for binary signals. 6M

UNIT-III

5. a) Explain narrow band fading models. 6M
b) Explain Ricean fading channels. 6M

OR

6. a) Give the impulse response for time varying channels. 6M
b) Describe all multipath parameters in detail. 6M

UNIT-IV

7. a) Explain band limited channels. 6M
b) Explain zero forcing linear equalization. 6M

OR

8. a) Explain decision feedback equalization. 6M
b) Explain Nyquist criterion. 6M

UNIT-V

9. a) Explain DPSK in detail. 6M
b) Explain OFDM. 6M

OR

10. a) Explain QPSK in detail. 6M
b) Explain multichannel and multicarrier systems. 6M

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(12ECM203)

**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: DECS

PAPER : MODERN RADAR SYSTEMS

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-1

1. a) Explain different types of antennas. 6M
b) Explain transmitter and receiver in radar systems with neat block diagrams. 6M
OR
2. a) Explain target characteristics. 6M
b) Explain i) radar displays & ii) radar cross section. 6M

UNIT-II

3. a) Explain cumulative radar detection technique. 6M
b) Explain horizon search concepts. 6M
OR
4. a) Give the differences between reflector and phased array radars. 6M
b) Derive radar search equation. 6M

UNIT-III

5. Explain the following. 12M
a. Error source in radar measurement characteristics.
b. GDOP.
c. Discrimination principles.
OR
6. Explain the following measurements. 12M
a. Range.
b. Angle and
c. Radial velocity.

UNIT-IV

7. a) Explain CW radar in detail. 6M
b) Explain atmospheric effects. 6M
OR
8. a) Explain in detail about MTI radar. 6M
b) Explain ionospheric effects in detail. 6M

UNIT-V

9. a) Explain space time adaptive processing in detail. 6M
b) Explain main lobe and side lobe jamming techniques in detail. 6M
OR
10. a) Explain synthetic aperture radars in detail. 6M
b) Give the characteristics of space based radar. 6M



**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: EEE(Computer Aided Power System)

PAPER : HVDC TRANSMISSION

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-1

1. a) Explain the merits and demerits of D.C. Transmission over AC Transmission. 6M
b) Draw the schematic diagram of a typical HVDC converter station and explain the function of each component. 6M

OR

2. a) Draw the circuit diagram of a three phase six pulse bridge converter and derive the expression for the average DC voltage neglecting over lap. 6M
b) Derive the rectifier $V_d - I_d$ characteristic considering three value conduction mode. 6M

UNIT-II

3. a) Draw the steady state equivalent circuit of a two terminal DC link and explain the basic principle of DC link control. 6M
b) From the above deduce the converter controller characteristics. 6M

OR

4. a) Draw and explain the hierarchical control structure of a DC link. 6M
b) Explain the principle of individual phase control firing scheme and discuss its limitation 6M

UNIT-III

5. a) Explain the reactive power requirements of the converter with the aid of Pd-Qd characteristics. 6M
b) Mention the various sources of reactive power and explain the principle of static Var compensators. 6M

OR

6. a) Explain the characteristic and non characteristic harmonics introduced in the converter. 6M
b) Explain the principles of various types of passive AC filters. 6M

UNIT-IV

7. a) Explain the continuous and discrete time models of the converter.
b) Draw the equivalent circuit of DC net work and derive its state space model.

OR

[P.T.O.]

8. a) Explain the basic converter equations, DC network equations and DC control equations used in power flow analysis. 6M
b) Discuss the unified method and sequential methods for AC/DC load flow studies. 6M

UNIT-V

9. a) Discuss the converter model, converter controller model and DC network model used in stability Analysis. 6M
b) Explain the direct methods for stability evaluation and the stability improvement using DC link control. 6M

OR

10. a) Discuss the Basic principles of power Modulation for a two area system and the controller structure. 6M
b) Discuss the selection of control signals and the controller design for damping of low frequency oscillations. 6M

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M.TECH DEGREE EXAMINATION DECEMBER 2013**SECOND SEMESTER****Branch: CSE****PAPER : GRID COMPUTING****Time: 3 Hours****Max.Marks: 60**

Instructions: Each Unit carries 12 marks.
 Answer all units choosing one question from each unit.

UNIT-I

1. (a) Distinguish between distributed computing, cluster computing and grid computing? 6M
 (b) What are the applications of grid computing? 6M
 OR
2. (a) What are the challenges of grid computing? 6M
 (b) List out the communities that use grid computing? 6M

UNIT-II

3. (a) Briefly explain grid monitoring architecture? 6M
 (b) Explain GridICE monitoring system? 6M
 OR
4. (a) Explain service level agreements of grid monitoring system? 6M
 (b) Explain Ganglia grid monitoring system? 6M

UNIT-III

5. (a) Explain the grid security architecture? 6M
 (b) Explain the principles of Local Schedulers? 6M
 OR
6. (a) Explain grid scheduling with QOS? 6M
 (b) Write notes on grid scheduling? 6M

UNIT-IV

7. (a) List out the typical functionalities of grid portal? 6M
 (b) List out the data management challenges? 6M
 OR
8. (a) List out the data management services provided by grid? 6M
 (b) Explain how grid portals are generated? 6M

UNIT-V

9. (a) Explain the features of Globus toolkit? 6M
 (b) Explain the features of next generation grid? 6M
 OR
10. (a) Explain the features of gLite? 6M
 (b) List out the globally available middleware? 6M

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(ME PS C 205)

M.TECH DEGREE EXAMINATIONS DECEMBER 2013

SECOND SEMESTER

Branch: EEE (Computer Aided Power System)

Paper : VOLTAGE STABILITY

Time: 3 hours

Max.Marks: 60

Answer Any ONE question from each unit

All questions carry equal marks

UNIT-I

1. a). Explain about the concepts voltage stability, voltage collapse and voltage security?
- b). Explain about transient voltage stability, long-term voltage stability, long-term voltage in- stability with a black-out as an example?

OR

2. a). Write the relation between voltage stability to rotor angle stability using P-V curves?
- b). Briefly explain about voltage stability analysis using Q-V Curves?

UNIT-II

3. a). Write about generator reactive power capability?
- b). Explain briefly about steady state models of synchronous machine?

OR

4. a). Explain the concept of generator control and protection?
- b). Discuss about different types of system response to power impacts?

UNIT-III

5. a). Explain about modeling and testing in super base case?
- b). Explain about power flow analysis by the Bourneville power administration?
Explain with their enhancement ?

OR

6. a). Explain Briefly about dynamic performance including under voltage load shedding ?
- b). Explain about automatic control of mechanically switched capacitors?

UNIT-IV

7. a). Write the differences between static var compensation and series capacitor compensation?
- b). Explain about load tap change transformer?

OR

8. a). Explain about different types of loads in power system?
- b). Explain about sub transmission and distribution feeder representation?

UNIT-V

9. a). Explain about steady state static real power stability and steady state reactive power stability ?
- b). Briefly Explain the basic principle of system voltage control?

OR

10. a). Discuss the limitations of reactive power in voltage stability ?
- b). How the voltage vary with respect to the reactive power change? Explain Briefly?

(MECSC109)

M. Tech DEGREE EXAMINATION DECEMBER 2013

Branch: Computer Science & Engineering
II SEMESTER

PAPER : SOFTWARE ARCHITECTURE

Time: 3 Hours

Max.Marks: 60

Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.

UNIT-I

1. (a) Define software Architecture? Explain architecture business cycle with neat diagram?
(b) Describe the architectural structure of Design?

OR

2. (a) Explain The module based structure?
(b) Explain various process recommendations as used by architect in architectural design?

UNIT-II

3. (a) List the different Architectural styles and discuss event-based , implicit invocation ?
(b) Discuss the advantages and disadvantages of Pipes and filters architectural styles?

OR

4. (a) . Write a note on Heterogeneous architecture?
(b) Explain the software paradigm for Process control?

UNIT-III

5. (a) Explain the advantages of whole-part pattern?
(b) Explain the steps involved in implementing micro kernel system?

OR

6. (a) Explain the advantages and disadvantages of reflective architectural pattern?
(b) Briefly explain the steps involved to implement black board pattern?

UNIT-IV

7. (a) Explain the critical elements of an ADL?
(b) What are the six classes of properties that characterize what an ideal ADL would provide?

OR

8. (a) Explain the infrastructure of CORBA ?
(b) Explain the requirements for capturing Architectural information in ADL?

UNIT-V

9. (a) Explain the reuse of architectural assets for creating products within an organization?
(b) Explain organizational implications of a Component based system?

OR

10. (a) What are Architectural assets and their impact on organization?
(b) Explain the notion "From architecture to design"?

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M.TECH DEGREE EXAMINATION DECEMBER 2013

SECOND SEMESTER

Branch: DECS

PAPER: ADAPTIVE SIGNAL PROCESSING

Tim: 3 hours

Max.Marks: 60

Answer Any ONE question from each unit
All questions carry equal marks

UNIT-I

1. a) Explain characteristics of adaptive system. 6M
b) Explain weight vectors. 6M
OR
2. a) Explain adaptive linear combiner in detail. 6M
b) Give some examples of an adaptive system. 6M

UNIT-II

3. a) Explain linear optimum filtering. 6M
b) Explain orthogonality principle. 6M
OR
4. a) State and explain gradient search algorithm. 6M
b) State and prove wiener-hopf equation. 6M

UNIT-III

5. a) Explain steepest decent method. 6M
b) Give the properties of eigen values. 6M
OR
6. a) State and explain eigen value problem. 6M
b) Explain eigen filters. 6M

UNIT-IV

7. a) Explain LMS gradient algorithm. 6M
b) Explain noise cancellation. 6M
OR
8. a) Explain LMS adaptive algorithm. 6M
b) Explain cancellation of echos in long distance telephone circuits. 6M

UNIT-V

9. a) Explain weighted recursive least square algorithm. 6M
b) Give the applications of RLS algorithm. 6M
OR
10. a) State and explain kalman filter. 6M
b) Give different variants of kalman filtering. 6M

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(MESC110)

M. Tech DEGREE EXAMINATION DECEMBER 2013

Branch : COMPUTER SCIENCE & ENGINEERING
II SEMESTER

Paper : WEB TECHNOLOGIES

Time: 3 Hours

Max.Marks: 60

Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.

UNIT-I

1. (a) Explain the types of Cascading style sheets? 8
(b) Write a java script program to find the factorial of a given number? 4

OR

2. (a) Explain the types of XML parsers? 6
(b) Explain the difference between DTD and Schema with an example? 6

UNIT-II

3. (a) Write a program to demonstrate Button and labels?. 6
(b) Explain Java bean API ? 6

OR

- 4.(a) Differentiate between AWT and SWING components. Explain with an example programs? 6
(b) Write a program for implementing Combo box using swings? 6

UNIT-III

5. (a) Explain the lifecycle of an Servlet? 6
(b) Write a program for cookies using servlet? 6

OR

- 6.(a) Demonstrate the reading of initialization paprameters using Servlet? 6
(b) Differentiate between Servlets and JSP? 6

UNIT-IV

7. (a) Explain the types of implicit JSP objects? 6
(b) Explain the session tracking using JSP? 6

OR

8. (a) Explain the types of scripting elements used in JSP? 6
(b) Differentiate between static and dynamic content? 6

[P.T.O.]

UNIT-V

- 9.(a)** Explain the types of JDBC drivers? **6**
- (b)** Explain the deployment of Java Beans in JSP page? **6**

OR

- 10. (a)** Explain the types of statements in javax.sql package? **6**
- (b)** Explain a program to demonstrate JDBC connectivity? **6**

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**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: ECE

PAPER : MICRO-COMPUTER SYSTEM DESIGN

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-I

1. a) Explain the architectural features of 80286 micro processor. 6M
b) Explain data transfer instructions of 80286 micro processor. 6M

OR

2. a) Explain addressing models of 8086 micro processor. 6M
b) Explain architectural features of 8086 micro processor. 6M

UNIT-II

3. a) Explain pin configurations of 80486 micro processor. 6M
b) Explain memory management in 80486 micro processor. 6M

OR

4. a) Explain the paging mechanism in micro processor. 6M
b) Explain architectural features of 80386 micro processor. 6M

UNIT-III

5. a) Give the differences between Pentium IV and dual core micro processors. 6M
b) Explain special registers in dual core micro processors. 6M

OR

6. a) Explain cache structure. 6M
b) Explain Pentium registers and I/O system in Pentium micro processors. 6M

UNIT-IV

7. a) Explain block transfer instructions. 6M
b) Explain semaphore operations. 6M

OR

8. a) Give the differences between programmed I/O and interrupt driven I/O 6M
b) Explain virtual memory concept of 80286 microprocessors. 6M

UNIT-V

9. Explain architectural features of 8087. Also explain instruction set for 8087 micro processor. 12M

OR

10. a) Explain data formats for arithmetic co-processors. 6M
b) Explain MMX in detail. 6M

M.TECH DEGREE EXAMINATION DECEMBER 2013

SECOND SEMESTER

Branch: EEE (Computer Aided Power System)

Paper : REACTIVE POWER CONTROL

Tim: 3 hours

Max.Marks: 60

Answer Any ONE question from each unit

All questions carry equal marks

UNIT-I

1. a) Write short notes on Reactive requirements of a Transformer?
b) Briefly Explain about Tap-changing's in Transformer?

OR

2. a) Explain about reactive power requirements of Distribution feeders?
b) Explain about generation of Harmonics from different parts of the power system?

UNIT-II

3. a) Explain about stability of the power system and explain about the effect of capacitors on stability load-ability of a line?
b) Write about the behavior of system voltages?

OR

4. a) Write about the varieties of Static VAR controllers?
b) Write about the transient stability of the power system?

UNIT-III

5. a) Explain about the objectives of planning in Distribution system?
b) Explain about Economically optimum investment on power factor correction ?

OR

6. a) Explain about capacitor placements in Distribution system ?
b) Write about retrofitting of capacitor banks in distribution system?

UNIT-IV

7. a) Explain about overall picture of the power requirement in INDIA ?
b) Explain about lighting load and their reactive power requirement in INDIA?

OR

8. a) Explain about reactive power requirement of refrigerators, air-conditioners and UPS systems ?
b) Explain about reactive power requirement in electronic ,electrical devices and house-hold wiring ?

UNIT-V

9. a) Explain about standard sizes and control of LT capacitor bank ?
b) Write about different types of sensing devices in planning methods ?

OR

10. a) Write about different types of Harmonic Reduction Techniques ?
b) Write about different types of filters using in LT and HT networks?

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(12ECM206)

**M.TECH DEGREE EXAMINATION DECEMBER 2013
SECOND SEMESTER**

Branch: DECS

PAPER : DSP PROCESSORS IN ARCHITECTURES

Tim: 3 hours

Max.Marks: 60

**Answer Any ONE question from each unit
All questions carry equal marks**

UNIT-1

1. a) Explain LTI systems. 6M
b) Explain interpolation. 6M

OR

2. a) Explain in detail about digital filters. 6M
b) Explain decimation. 6M

UNIT-II

3. a) Explain the relation between data word-size and instruction word size. 6M
b) Define and explain dynamic range and precision. 6M

OR

4. a) Explain different D/A conversion errors. 6M
b) Explain different types of representations of numbers in DSP processors. 6M

UNIT-III

5. Explain the architectural features of TMS320C54XX processors. 12M

OR

6. a) What are different addressing modes in DSP processors? Explain. 6M
b) Explain how the multiplication and addition are carried out in floating point arithmetic. 6M

UNIT-IV

7. a) Explain the instruction set of TMS 320C 54XX on the basis of operation. 6M
b) Write an algorithm to implement FFT on a DSP processor. 6M

OR

8. a) Why FIR filters are preferred to be widely used in adaptive filters. 6M
b) Explain how an IIR filter is implemented in DSP processor. 6M

[P.T.O.]

UNIT-V

9. a) Explain different types of interrupts. 6M
b) Explain CODEC interface circuit. 6M

OR

10. a) Explain DMA. 6M
b) Explain different I/O peripherals. 6M

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M. Tech DEGREE EXAMINATION DECEMBER 2013

Branch : Computer Science & Engineering
II SEMESTER

Paper IV: -CLOUD COMPUTING

Time: 3 Hours

Max.Marks: 60

Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.

UNIT-I

1. (a) List out the advantages and disadvantages of cloud computing? 6M
(b) Enumerate different services provided by cloud computing? 6M
OR
2. (a) What is a cloud? Give cloud architecture? 6M
(b) List any three companies that are in cloud and the services provided by them? 6M

UNIT-II

3. (a) Write notes on platform as a service?. 6M
(b) Write notes on services provided by IBM platform ? 6M
OR
4. (a) Write notes on Amazon web services? 6M
(b) Write notes on software as a service? 6M

UNIT-III

5. (a) Write notes on centralized email communications? 6M
(b) Write notes on how cloud computing is useful for community? 6M
OR
6. (a) Explain how cloud computing is useful for corporation? 6M
(b) Explain how collaborating of contact lists is made? 6M

UNIT-IV

7. (a) Write notes on how cloud is used for online planning and task management? 6M
(b) Explain any one online scheduling application? 6M
OR
8. (a) Explain collaborating on word processing? 6M
(b) Explain collaborating on databases? 6M

UNIT-V

9. (a) Explain collaborating via web communication? 6M
(b) Explain collaborating via social networks? 6M
OR
10. (a) Explain collaborating via blogs and wikis? 6M
(b) Explain evaluating web mail service? 6M

(MEPSE 202)

M. Tech DEGREE EXAMINATION DECEMBER 2013

Branch : EEE (Computer Aided Power System)
II SEMESTER

PAPER : FUZZY LOGIC & CONTROL

Time: 3 Hours

Max.Marks: 60

Instructions: Each Unit carries 12 marks.
Answer all units choosing one question from each unit.

UNIT-I

1. (a) What are the factors effecting control system performance, explain? 7 M
(b) Give any two examples of controllers used in control system design? 5M

OR

2. (a) What is fuzzy control ? What are advantages of fuzzy control? 6M
(b) How performance of a fuzzy controller is measured? 6M

UNIT-II

3. (a) What are the components of fuzzy controller ? 6M
(b) Explain how control knowledge is converted to rule bases? 6M

OR

4. (a) Explain defuzzification using MOM method? 6M
(b) Explain defuzzification using center of gravity method? 6M

UNIT-III

5. (a) Discuss the issues regarding implementation of real time fuzzy controllers?6M
(b) Explain how non linear systems are simulated with an example? 6M

OR

6. (a) Write notes on PD fuzzy controller? 6M
(b) Write notes on parameterized fuzzy controller? 6M

UNIT-IV

7. (a) Explain learning mechanism of fuzzy controller ? 6M
(b) Write notes on knowledge base modifiers ? 6M

OR

8. (a) Explain adaptive parallel distributed compensation? 6M
(b) Explain online identification methods for fuzzy control ? 6M

[P.T.O.]

UNIT-V

9. (a) Write notes on fuzzy tuning of PID controllers ? 6M
(b) Write notes on fuzzy supervision of conventional controllers? 6M

OR

- 10.(a) Distinguish between fuzzy control verses conventional control? 6M
(b) Write notes on supervised fuzzy learning control? 6M

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