

Day & Date	Semester	Subject Name	Time	Roll No.	Marks
Friday 06/04/2018	III (Repeater)	File structure and Database Management	02.30 PM to 05.00 PM	1104	75

Instruction.

- i) Question No. 1 is compulsory.
- ii) Attempt any four from Q.2 to Q.6

Q.1	a) Define the following terms: 1) Sparse Index 2) Transaction 3) Serializability 4) Hashing 5) B - Tree	(10)
	b) What is file? Explain types of file	(5)
Q.2	a) Explain ACID properties of transaction	(8)
	b) Explain 2 - phase locking protocol	(7)
Q.3	a) Explain steps of Query Processing	(8)
	b) What is collision? Explain Collision resolution techniques	(7)
Q.4	a) Explain Secondary Index with example	
	b) Explain Materialization with example	
Q.5	a) Explain Lost update and Dirty read problem with example	(5)
	b) Explain Thomas write rule	
Q.6	a) Simplify the query and translate it into a query tree and optimize it. Relation : student(rollno, name, marks, deptno) Department (deptno, dept name) Query : Display list of those student names whose marks is > 70 and studying in IT department	(13)
	b) What is lock? Explain types of lock?	(7)

Day & Date	Semester	Subject Name	Time	Code	Marks
Tuesday 02/04/2019	III (Repeater)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

Instruction:

- I. Q.1 is compulsory.
- II. Solve any four questions from Q.2 to Q.8.
- III. All questions carry equal marks.
- IV. Draw neat and proper diagrams if necessary.

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- Q.1. a) Describe characteristics of Disk System. [8]
b) State different types of Semi-Conductors Memories. [7]
- Q.2. a) Draw and explain the basic components of a computer System. [7]
b) Explain Programmed I/O with the help of a Flow chart? [8]
- Q.3. a) What is RISC? Describe RISC pipeline with a suitable Example [8]
b) Explain elements of Bus Design? [7]
- Q.4. a) What is Mapping Function? Explain direct mapping Technique of cache memory design? [8]
b) Describe the function of I/O Module? [7]
- Q.5. a) Explain the cache read operation using flow chart? [7]
b) Discuss DMA Function [8]
- Q.6. a) Describe the memory hierarchy with diagram? [8]
b) Differentiate between Magnetic memory and optical Memory [7]
- Q.7. a) Explain different design issues for interrupt driven I/O [8]
b) Compare SISD Vs MISD. [7]
- Q.8. Give short notes on (Each Carries 5 Marks) [15]
a) CISC
b) WORM
c) System Bus

Day & Date	Semester	Subject Name	Time	Circle	Marks
Wednesday 20/03-2018	III (Repeater)	Introduction to Microprocessor	02.30 PM To 05.00 PM	3101	70

Instructions:

1. Question No. 1 is compulsory.
2. Attempt any 4 questions from Question No. 2 to Q. number No. 7.
3. Figure to right indicates full marks.

Q1	a)	What are different functions and operations performed by a microprocessor?	8
	b)	Draw and explain any two bus structure.	7
Q2	a)	Explain different types of RAM and ROM.	8
	b)	What are addressing modes? Explain different types of addressing modes in 8085 microprocessor.	7
Q3	a)	Explain 8257 PPIA controlled with internal register.	8
	b)	What are the different types of serial communication? Explain with a diagram.	7
Q4	a)	Draw and explain the pin configuration of 8085 microprocessor in detail.	10
	b)	Explain the role of 8255 PPIA in interfacing with 8085 microprocessor.	7
Q5		Draw any diagram of 8085 microprocessor.	7
Q6	a)	Write a hex code to Rotate 01010101.	8
	b)	Describe the 8085 instruction.	7
Q7	a)	Write short note on R045.	7
	b)	Write a short note on DM/D.	7
Q8	a)	Write a program in assembly language to subtract 25 from 40.	7
	b)	Write a program in assembly language to multiply 20 by 10.	8

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Day & Date	Somester	Subject Name	Time	Code	Marks
Saturday 30/03/2019	III Repeater	Introduction To Microprocessor	11.00 AM to 01.30 PM	3101	75

Instruction:

- i) Q. No. 1 is compulsory.
- ii) Attempt any 4 questions from Q.2 to Q.8.

- Q.1 a) What are different functions and operations performed by a microprocessor? (8)
b) What are vectored interrupts? Explain 8085 vectored interrupts. (7)
- Q.2 a) Explain flag registers with diagram. (8)
b) Explain the types of RAM and ROM. (7)
- Q.3 a) Draw and explain the pin diagram of 8085 microprocessor in detail. (10)
b) Draw and explain system bus structure. (5)
- Q.4 a) Explain 8237 DMA controller with internal register. (8)
b) Explain Arithmetic instruction set of 8085 microprocessor. (7)
- Q.5 a) What are addressing modes? Explain different types of addressing modes in 8085 microprocessor. (3)
b) What are the different types of serial communication? Explain with diagram. (7)
- Q.6 a) Explain the function of following pins of 8085 microprocessor. (8)
i) $\overline{IO/\overline{M}}$ ii) \overline{RESET} iii) ALE iv) \overline{HOLD}
b) Explain logical instruction set of 8085 microprocessor. (7)
- Q.7 a) Write short note on: (15)
i) ECC
ii) EDO
iii) SIMM
- Q.8 a) State the characteristics of 80286 and 80386 microprocessor. (8)
b) Explain the internal block diagram of 8259 interrupt controller. (7)

Day & Date	Semester	Subject Name	Time	Code	Marks
Friday 08/11/2019	III (Fresh)	Introduction to Microprocessor	11.00 AM to 01.30 PM	3101	75

Instruction:

- I) Q. No. 1 is compulsory.
- II) Attempt any 4 questions from Q.2 to Q.8.

- Q1) Draw and Explain architecture of 8085 15
- Q2) a) Explain call and jump on condition instruction 10
b) Write short note on 4004 5
- Q3) a) Write short note on Integrate Circuit 8
b) What are different functions and operations performed by a microprocessor? 7
- Q4) a) Explain Flag register 7
b) Write a short note on different types of addressing mode 8
- Q5) a) Write is interrupt? How microprocessor response on interruption 10
b) Explain ISR, PR and IRR of 8259 5
- Q6) a) Write short note on DMA 5
b) Draw and explain pin diagram of 8251 USART 10
- Q7) a) Write short note on SIMM and DIMM 8
b) Write short note on RAM 7
- Q8) a) Write a program to transfer n values from one memory location to other 8
b) Write a program to perform multiplication of 2 values 7

Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

- 1) Write short notes on the following.
 - a) Bus interconnection structure 7
 - b) Cache memory 8
- 2) a) Explain interrupt driven I/o with flow chart. 8
 - b) Discuss characteristics of magnetic disk? 7
- 3) a) Draw and explain basic instruction cycle? 7
 - b) Explain functions of I/O module? 8
- 4) a) Describe the memory hierarchy with diagram? 8
 - b) Differentiate between magnetic tape and magnetic disk? 7
- 5) a) What is RISC? Describe RISC pipelining with suitable diagram? 8
 - b) Discuss DMA function? 7
- 6) a) Differentiate between RAM and ROM. 8
 - b) Explain basic components of computer with diagram? 7
- 7) a) Describe processor parallel processing (SISD and SIMD) 8
 - b) Explain optical memory in detail? 7
- 8) Write short note on. 15
 - a) CISC
 - b) WORM
 - c) EPROM and EEPROM

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

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- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
 B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
 B) Explain Thomas Write Rule. 7
- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

- Q.7) A) Simplify the query & translate it into a query tree and optimize it. 10
- Relation : student(studid,name,age,deptno)
Dept(deptno,deptname)
- Query : Display list of those students whose age is <25 and working in the Student Council Department.
- B) Explain Starvation of locks. 5
- Q.8) A) Explain the deadlock detection and recovery technique. 10
- B) Write a short note on-Compatibility Matrix. 5



Day & Date	Semester	Subject Name	Time	Code	Max. Marks
Thursday 04.11.2017	III (Fresh / Repeater)	Introduction to Microprocessor	11.00 AM To 01.30 PM	3101	75

Note: Q. No. 1 is compulsory.

2) Attempt any 4 questions from Q.2 No. to Q.No.8.

- Q.1 a) What are different functions and operations performed by a microprocessor? 08
b) Which are the types of serial communication? Explain. 07
- Q.2 a) What are two different methods of interfacing I/O to the microprocessor? 08
b) Explain flag registers with diagram. 07
- Q.3 a) Explain following instructions: 08
1) INR E
2) STA 2500
3) LDA 2050
4) OUT 01H
b) What are vectored interrupts? Explain 8085 vectored interrupts. 07
- Q.4 a) Draw and explain the pin diagram of 8085 microprocessor in detail. 10
b) State the characteristics of 8048 microprocessor. 05
- Q.5 a) Explain the internal block diagram of 8259 interrupt controller. 08
b) Explain the types of RAM and ROM. 07
- Q.6 a) Explain the function of following pins of 8085 microprocessor. 08
1) INTA
2) RESET
3) ALE
4) HOLD
b) What are the addressing modes? Explain different types of addressing modes in 8085 microprocessor. 07
- Q.7 a) Explain 8237 DMA controller with internal register. 08
b) Explain Arithmetic instruction set of 8085 microprocessor. 07
- Q.8 a) Write short note on: 15
1) ECC
2) SIMM
3) Address decoding

Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

- 1) Write short notes on the following.
 - a) Bus interconnection structure 7
 - b) Cache memory 8
- 2) a) Explain interrupt driven I/o with flow chart. 8
 - b) Discuss characteristics of magnetic disk? 7
- 3) a) Draw and explain basic instruction cycle? 7
 - b) Explain functions of I/O module? 8
- 4) a) Describe the memory hierarchy with diagram? 8
 - b) Differentiate between magnetic tape and magnetic disk? 7
- 5) a) What is RISC? Describe RISC pipelining with suitable diagram? 8
 - b) Discuss DMA function? 7
- 6) a) Differentiate between RAM and ROM. 8
 - b) Explain basic components of computer with diagram? 7
- 7) a) Describe processor parallel processing (SISD and SIMD) 8
 - b) Explain optical memory in detail? 7
- 8) Write short note on. 15
 - a) CISC
 - b) WORM
 - c) EPROM and EEPROM

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

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- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
 B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
 B) Explain Thomas Write Rule. 7
- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Day & Date	Semester	Subject Name	Time	Code	Marks
Friday 08/11/2019	III (Fresh)	Introduction to Microprocessor	11.00 AM to 01.30 PM	3101	75

Instruction:

- i) Q. No. 1 is compulsory.
- ii) Attempt any 4 questions from Q.2 to Q.8.

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|-----|---|----|
| Q1) | Draw and Explain architecture of 8085 | 15 |
| Q2) | a) Explain call and jump on condition instruction | 10 |
| | b) Write short note on 4004 | 5 |
| Q3) | a) Write short note on Integrate Circuit | 8 |
| | b) What are different functions and operations performed by a microprocessor? | 7 |
| Q4) | a) Explain Flag register | 7 |
| | b) Write a short note on different types of addressing mode | 8 |
| Q5) | a) Write is interrupt? How microprocessor response on interruption | 10 |
| | b) Explain ISR, PR and IRR of 8259 | 5 |
| Q6) | a) Write short note on DMA | 5 |
| | b) Draw and explain pin diagram of 8251 USART | 10 |
| Q7) | a) Write short note on SIMM and DIMM | 8 |
| | b) Write short note on RAM | 7 |
| Q8) | a) Write a program to transfer n values from one memory location to other | 8 |
| | b) Write a program to perform multiplication of 2 values | 7 |

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

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- Q.1) A) Define the following terms 10
1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
5) Dense index
B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
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- Q.5) A) What is lock? Explain types of locks. 8
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Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
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- Q.5) A) What is lock? Explain types of locks. 8
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- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

- 1) Write short notes on the following.
 - a) Bus interconnection structure 7
 - b) Cache memory 8
- 2) a) Explain interrupt driven I/o with flow chart. 8
 - b) Discuss characteristics of magnetic disk? 7
- 3) a) Draw and explain basic instruction cycle? 7
 - b) Explain functions of I/O module? 8
- 4) a) Describe the memory hierarchy with diagram? 8
 - b) Differentiate between magnetic tape and magnetic disk? 7
- 5) a) What is RISC? Describe RISC pipelining with suitable diagram? 8
 - b) Discuss DMA function? 7
- 6) a) Differentiate between RAM and ROM. 8
 - b) Explain basic components of computer with diagram? 7
- 7) a) Describe processor parallel processing (SISD and SIMD) 8
 - b) Explain optical memory in detail? 7
- 8) Write short note on. 15
 - a) CISC
 - b) WORM
 - c) EPROM and EEPROM

Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

- 1) Write short notes on the following.
 - a) Bus interconnection structure 7
 - b) Cache memory 8
- 2) a) Explain interrupt driven I/o with flow chart. 8
 - b) Discuss characteristics of magnetic disk? 7
- 3) a) Draw and explain basic instruction cycle? 7
 - b) Explain functions of I/O module? 8
- 4) a) Describe the memory hierarchy with diagram? 8
 - b) Differentiate between magnetic tape and magnetic disk? 7
- 5) a) What is RISC? Describe RISC pipelining with suitable diagram? 8
 - b) Discuss DMA function? 7
- 6) a) Differentiate between RAM and ROM. 8
 - b) Explain basic components of computer with diagram? 7
- 7) a) Describe processor parallel processing (SISD and SIMD) 8
 - b) Explain optical memory in detail? 7
- 8) Write short note on. 15
 - a) CISC
 - b) WORM
 - c) EPROM and EEPROM

Day & Date	Semester	Subject Name	Time	Code	Marks
Friday 08/11/2019	III (Fresh)	Introduction to Microprocessor	11.00 AM to 01.30 PM	3101	75

Instruction:

- I) Q. No. 1 is compulsory.
 II) Attempt any 4 questions from Q.2 to Q.8.

- Q1) Draw and Explain architecture of 8085 15
- Q2) a) Explain call and jump on condition instruction 10
 b) Write short note on 4004 5
- Q3) a) Write short note on Integrate Circuit 8
 b) What are different functions and operations performed by a microprocessor? 7
- Q4) a) Explain Flag register 7
 b) Write a short note on different types of addressing mode 8
- Q5) a) Write is interrupt? How microprocessor response on interruption 10
 b) Explain ISR, PR and IRR of 8259 5
- Q6) a) Write short note on DMA 5
 b) Draw and explain pin diagram of 8251 USART 10
- Q7) a) Write short note on SIMM and DIMM 8
 b) Write short note on RAM 7
- Q8) a) Write a program to transfer n values from one memory location to other 8
 b) Write a program to perform multiplication of 2 values 7

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

-
- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
- B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
 B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
 B) Explain Thomas Write Rule. 7
- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Q.7) A) Simplify the query & translate it into a query tree and optimize it. 10

Relation : student(studid,name,age,deptno)

Dept(deptno,deptname)

Query : Display list of those students whose age is <25 and working in the Student Council Department.

B) Explain Starvation of locks. 5

Q.8) A) Explain the deadlock detection and recovery technique. 10

B) Write a short note on-Compatibility Matrix. 5

Day & Date	Semester	Subject Name	Time	Code	Max. Marks
Thursday 09/11/2017	III (Fresh / Repeater)	Introduction to Microprocessor	11.00 AM To 01.30 PM	3101	75

Note: Q. No. 1 is compulsory

2) Attempt any 4 questions from Q.2 No. 10-Q.No.8.

- Q.1 a) What are different functions and operations performed by a microprocessor? 08
 b) Which are the types of serial communication? Explain. 07
- Q.2 a) What are two different methods of interfacing I/O to the microprocessor? 08
 b) Explain flag registers with diagram. 07
- Q.3 a) Explain following instructions: 08
 1) INX B
 2) STA 2500
 3) LDA 2050
 4) OUT 01H
- b) What are vectored interrupts? Explain 8085 vectored interrupts. 07
- Q.4 a) Draw and explain the pin diagram of 8085 microprocessor in detail. 10
 b) State the characteristics of 80486 microprocessor. 05
- Q.5 a) Explain the internal block diagram of 8259 interrupt controller. 08
 b) Explain the types of RAM and ROM. 07
- Q.6 a) Explain the function of following pins of 8085 microprocessor. 08
 1) RDY
 2) RESWTRN
 3) ALE
 4) HOLD
- b) What are the addressing modes? Explain different types of addressing modes in 8085 microprocessor. 07
- Q.7 a) Explain 8237 DMA controller with internal register. 08
 b) Explain Arithmetic instruction set of 8085 microprocessor. 07
- Q.8 a) Write short note on:
 1) ECC
 2) SIMM
 3) Address decoding 15

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

-
- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
 B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
 B) Explain Thomas Write Rule. 7
- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Q.7) A) Simplify the query & translate it into a query tree and optimize it. 10

Relation : student(studid,name,age,deptno)

Dept(deptno,deptname)

Query : Display list of those students whose age is <25 and working in the Student Council Department.

B) Explain Starvation of locks. 5

Q.8) A) Explain the deadlock detection and recovery technique. 10

B) Write a short note on-Compatibility Matrix. 5

Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

1) Write short notes on the following.

- | | |
|---|----|
| a) Bus interconnection structure | 7 |
| b) Cache memory | 8 |
| 2) a) Explain interrupt driven I/o with flow chart. | 8 |
| b) Discuss characteristics of magnetic disk? | 7 |
| 3) a) Draw and explain basic instruction cycle? | 7 |
| b) Explain functions of I/O module? | 8 |
| 4) a) Describe the memory hierarchy with diagram? | 8 |
| b) Differentiate between magnetic tape and magnetic disk? | 7 |
| 5) a) What is RISC? Describe RISC pipelining with suitable diagram? | 8 |
| b) Discuss DMA function? | 7 |
| 6) a) Differentiate between RAM and ROM. | 8 |
| b) Explain basic components of computer with diagram? | 7 |
| 7) a) Describe processor parallel processing (SISD and SIMD) | 8 |
| b) Explain optical memory in detail? | 7 |
| 8) Write short note on. | 15 |
| a) CISC | |
| b) WORM | |
| c) EPROM and EEPROM | |

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

-
- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
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- Q.4) A) Explain last update problem and temporary update problem with example. 8
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- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Q.7) A) Simplify the query & translate it into a query tree and optimize it. 10

Relation : student(studld,name,age,deptno)

Dept(deptno,deptname)

Query : Display list of those students whose age is <25 and working in the Student Council Department.

B) Explain Starvation of locks. 5

Q.8) A) Explain the deadlock detection and recovery technique. 10

B) Write a short note on-Compatibility Matrix. 5

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

-
- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4)Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
 B) What is indexing? Explain Primary index with suitable example. 7
- Q.4) A) Explain last update problem and temporary update problem with example. 8
 B) Explain Thomas Write Rule. 7
- Q.5) A) What is lock? Explain types of locks. 8
 B) Explain Materialization and Pipelining. 7
- Q.6) A) What is hashing? Explain static & Dynamic hashing. 10
 B) Write a short note on System log. 5

Q.7) A) Simplify the query & translate it into a query tree and optimize it. 10

Relation : student(studid,name,age,deptno)

Dept(deptno,deptname)

Query : Display list of those students whose age is <25 and working in the Student Council Department.

B) Explain Starvation of locks. 5

Q.8) A) Explain the deadlock detection and recovery technique. 10

B) Write a short note on-Compatibility Matrix. 5

Day & Date	Semester	Subject Name	Time	Code	Marks
Saturday 16/11/2019	III (Fresh)	File Structure and Database Management	11.00 AM To 01.30 PM	3104	75

Note : 1) Question No.1 is Compulsory.

2) Attempt any four questions from Q.2 to Q.8

- Q.1) A) Define the following terms 10
 1) Timestamp 2) Hashing 3) Transaction 4) Deadlock
 5) Dense index
 B) Write a short note on- Query Tree 5
- Q.2) A) Explain ACID Properties of Transaction 8
 B) Explain steps of Query processing 7
- Q.3) A) Explain Transaction state with diagram 8
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Day & Date	Semester	Subject Name	Time	Code	Marks
Thursday 14/11/2019	III (Fresh)	Computer Organization and Architecture	11.00 AM To 01.30 PM	3103	75

- Instruction:**
- 1) Q 1 Is Compulsory.
 - 2) Attempt any 4 from Q. 2 To Q. 4.
 - 3) Each Question Carry 15 Marks.

- 1) Write short notes on the following.
 - a) Bus interconnection structure 7
 - b) Cache memory 8
- 2) a) Explain interrupt driven I/o with flow chart. 8
 - b) Discuss characteristics of magnetic disk? 7
- 3) a) Draw and explain basic instruction cycle? 7
 - b) Explain functions of I/O module? 8
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 - b) Differentiate between magnetic tape and magnetic disk? 7
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 - b) Discuss DMA function? 7
- 6) a) Differentiate between RAM and ROM. 8
 - b) Explain basic components of computer with diagram? 7
- 7) a) Describe processor parallel processing (SISD and SIMD) 8
 - b) Explain optical memory in detail? 7
- 8) Write short note on. 15
 - a) CISC
 - b) WORM
 - c) EPROM and EEPROM

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