



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15128916</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>PEDRO FRAIRE SOLÍS</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15132525</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b><i>JULIO CÉSAR LOZANO ALMAGUER</i></b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15158174</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>JORGE LUIS DÍAZ ENRÍQUEZ</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15149897</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b><i>JULIO CÉSAR GARCÍA CASTILLO</i></b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15133897</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>VÍCTOR MANUEL GARCÍA CARRILLO</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15132740</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>JOVANA SOLEDAD GARCÍA REYES</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15141730</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>VÍCTOR MANUEL PUENTES RODRÍGUEZ</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15153534</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b><i>JOSÉ ANTONIO RINCÓN ACOSTA</i></b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)





# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15149344</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>FABIÁN ALONSO SOTO LUNA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15140545</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>MAYRA SELENE MIRELES CARDOZA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15315202</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>ALAN M. CABRERA MORA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>13056433</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>DANIEL ALEJANDRO CARRILLO HERNÁNDEZ</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15122162</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>ORLANDO BARBOZA GARCÍA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>10069634</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>EDUARDO TORRES GOITIA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15157355</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>VICTOR SIFUENTES VARGAS</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>14576492</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b><i>JONATHAN RODRÍGUEZ CHÁVEZ</i></b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)





# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>15129708</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>LUIS FERNANDO CASTAÑEDA QUIROGA</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>14317737</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b><i>VANESA IRANÍ MORA MORENO</i></b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)



# Universidad Autónoma de Coahuila

## Facultad de Ingeniería Mecánica y Eléctrica

### Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	07/03/2017
Exam / Homework	Exam 1: Max time (1 hour 30 min)	Registration #	<b>7272835</b>
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<b>CASTREJÓN ALFARO SERGIO PABLO</b>		

## Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.  
(20% of the marks obtained will be reduced)

## Questions

1. List all the elements with: (3 points)
  - (a) four valance electrons.
  - (b) three valance electrons.
  - (c) five valance electrons.
2. Beyond which atomic number the elements show the property of radioactive decay (or nuclear decay)? (1 points)
3. What are the different allotropes of the carbon element? (3 points)
4. Draw and explain the monocrystalline silicon structure. (3 point)