Set No. 2

I B.Tech Examinations, May 2011 APPLIED CHEMISTRY Civil Engineering

Time: 3 hours

Code No: R07A1BS04

Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) What is pyrometric cone equivalent? How it is determined for a refractory? What is it significance?
 - (b) Write a very short notes on
 - i. Porosity
 - ii. Thermal Conductivity
 - iii. Dimensional Stability
 - iv. Strength.
- 2. Write short notes on the following:

[4+4+4+4]

- (a) Sedimentation and co-agulation
- (b) Impurities in water
- (c) Hardness of water
- (d) Chlorination.
- 3. Write preparation, properties and use of
 - (a) phenol-formaldehyde resins
 - (b) silicone rubber. [16]
- 4. Write short notes on:

[16]

- (a) Constituents of cement,
- (b) White cement,
- (c) RCC,
- (d) Tensile strength test.
- 5. (a) Write a critical account on electrochemical theory of corrosion.
 - (b) How are the metals protected against corrosion by modifying the environment give suitable examples. [8+8]
- 6. Distinguish between the following:

[6+6+4]

- (a) Scales and Sludges
- (b) Soft water and demineralised water.
- (c) Lime soda process and demineralization of water.

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- 7. (a) What is Anodizing? How is Anodizing on Al carried out?
 - (b) How is metal spraying done on metal surfaces? What are its applications?

[8+8]

- 8. (a) Comment on lubricants used for transformers.
 - (b) What are the criteria of a good with lubricant?
 - (c) Mention the types of greases with examples.

[6+4+6]

Set No. 4

I B.Tech Examinations, May 2011 APPLIED CHEMISTRY Civil Engineering

Time: 3 hours

Code No: R07A1BS04

Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

1. Write short notes on the following:

[4+4+4+4]

- (a) Sedimentation and co-agulation
- (b) Impurities in water
- (c) Hardness of water
- (d) Chlorination.
- 2. (a) Write a critical account on electrochemical theory of corrosion.
 - (b) How are the metals protected against corrosion by modifying the environment give suitable examples. [8+8]
- 3. Write short notes on:

[16]

- (a) Constituents of cement.
- (b) White cement,
- (c) RCC,
- (d) Tensile strength test.
- 4. (a) What is pyrometric cone equivalent? How it is determined for a refractory? What is it significance?
 - (b) Write a very short notes on

[6+10]

- i. Porosity
- ii. Thermal Conductivity
- iii. Dimensional Stability
- iv. Strength.
- 5. Write preparation, properties and use of
 - (a) phenol-formaldehyde resins
 - (b) silicone rubber.

[16]

- 6. (a) What is Anodizing? How is Anodizing on Al carried out?
 - (b) How is metal spraying done on metal surfaces? What are its applications?

[8+8]

7. (a) Comment on lubricants used for transformers.

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(b) What are the criteria of a good with lubricant?

(c) Mention the types of greases with examples.

[6+4+6]

8. Distinguish between the following:

[6+6+4]

(a) Scales and Sludges

(b) Soft water and demineralised water.

(c) Lime soda process and demineralization of water.

Set No. 1

I B.Tech Examinations, May 2011 APPLIED CHEMISTRY Civil Engineering

Time: 3 hours

Code No: R07A1BS04

Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) Write a critical account on electrochemical theory of corrosion.
 - (b) How are the metals protected against corrosion by modifying the environment give suitable examples. [8+8]

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- 2. (a) What is pyrometric cone equivalent? How it is determined for a refractory? What is it significance?
 - (b) Write a very short notes on

[6+10]

- i. Porosity
- ii. Thermal Conductivity
- iii. Dimensional Stability
- iv. Strength.
- 3. Write short notes on the following:

[4+4+4+4]

- (a) Sedimentation and co-agulation
- (b) Impurities in water
- (c) Hardness of water
- (d) Chlorination.
- 4. Write short notes on:

[16]

- (a) Constituents of cement,
- (b) White cement,
- (c) RCC,
- (d) Tensile strength test.
- 5. Write preparation, properties and use of
 - (a) phenol-formaldehyde resins

(b) silicone rubber.

[16]

- 6. (a) Comment on lubricants used for transformers.
 - (b) What are the criteria of a good with lubricant?
 - (c) Mention the types of greases with examples.

[6+4+6]

7. Distinguish between the following:

[6+6+4]

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(a) Scales and Sludges

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- (b) Soft water and demineralised water.
- (c) Lime soda process and demineralization of water.
- 8. (a) What is Anodizing? How is Anodizing on Al carried out?
 - (b) How is metal spraying done on metal surfaces? What are its applications?

[8+8]

Set No. 3

I B.Tech Examinations, May 2011 APPLIED CHEMISTRY Civil Engineering

Time: 3 hours

Code No: R07A1BS04

Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

1. Distinguish between the following:

[6+6+4]

- (a) Scales and Sludges
- (b) Soft water and demineralised water.
- (c) Lime soda process and demineralization of water.
- 2. Write short notes on:

[16]

- (a) Constituents of cement,
- (b) White cement,
- (c) RCC,
- (d) Tensile strength test.
- 3. Write short notes on the following:

[4+4+4+4]

- (a) Sedimentation and co-agulation
- (b) Impurities in water
- (c) Hardness of water
- (d) Chlorination.
- 4. (a) What is Anodizing? How is Anodizing on Al carried out?
 - (b) How is metal spraying done on metal surfaces? What are its applications?

[8+8]

- 5. (a) What is pyrometric cone equivalent? How it is determined for a refractory? What is it significance?
 - (b) Write a very short notes on

[6+10]

- i. Porosity
- ii. Thermal Conductivity
- iii. Dimensional Stability
- iv. Strength.
- 6. (a) Write a critical account on electrochemical theory of corrosion.
 - (b) How are the metals protected against corrosion by modifying the environment give suitable examples. [8+8]

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Set No. 3

- 7. (a) Comment on lubricants used for transformers.
 - (b) What are the criteria of a good with lubricant?
 - (c) Mention the types of greases with examples.

[6+4+6]

8. Write preparation, properties and use of

(a) phenol-formaldehyde resins

(b) silicone rubber.

[16]