Code No: A109100105 **Set No. 1**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

I B.Tech. II Mid Examinations, March – 2011

ENGINEERING CHEMISTRY

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. The fibre obtained by the step polymerization of hexamethylene diamine and adipic acid is [ ]
   (a) Decarbon (b) Nylon (c) Rayon (d) Terylene

2. The only rubber which cannot be vulcanized is [ ]
   (a) Butyl rubber (b) Thiokol rubber (c) Neoprene (d) Nitrile

3. The common catalyst used in co-ordination chain polymerization [ ]
   (a) Nickel (b) Zeigler – Natta catalyst (c) Zeolite (d) Platinum

4. Freundlich adsorption isotherm is a plot of [ ]
   (a) Mass and Volume (b) Mass and temperature
   (c) Mass and concentration (d) Mass and concentration

5. The amount of heat evolved when 1 mole of any gas is adsorbed on a solid adsorbent surface is called [ ]
   (a) Entropy (b) Enthalpy (c) Heat of reaction (d) Enthalpy of adsorption

6. Polyesters belong to the _____ type of polymer [ ]
   (a) Addition, thermoplastic (b) Addition, thermosetting
   (c) Condensation, thermoplastic (d) Condensation, thermosetting

7. Cellulose acetate is a [ ]
   (a) Thermoplastic (b) Thermosetting plastic (c) Both (d) none

8. Solubility of calcium sulphate in water [ ]
   (a) Increase with rise of temperature (b) Decreases with rise of temperature
   (c) Remains unaltered with rise of temperature
   (d) Does not adopt any definite pattern with rise of temperature

9. Brakish water mostly contains dissolved [ ]
   (a) Calcium salts (b) Magnesium salts (c) Turbidity (d) Sodium chloride

10. If the substance is uniformly distributed throughout the body of a solid or a liquid, then it is called [ ]
    (a) Adsorption (b) Chemisorption (c) Physiorption (d) Absorption

Cont.....2

II Fill in the Blanks

11. Thiokol rubber is made by reaction between _____ and _____

12. Styrene rubber is a polymer of styrene and _____

13. Latex is the dispersion of _____ molecules.

14. Stereospecific polymers are obtained by _____ polymerization.

15. In lime-soda process of softening, calcium and magnesium ions are precipitated as _____ and _____.

16. _____ in boilers produce wet steam.

17. _____ is used as an indicator in the determination of hardness by EDTA method.

18. $Al_2(S0_4)_3$ alum produce _____ as flocculant precipitates during softening water.

19. The presence of even small amounts of NaOH will cause _____ of boiler

20. Fullerenes are the examples of _____

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Code No: A109100105 **Set No. 2**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

I B.Tech. II Mid Examinations, March – 2011

ENGINEERING CHEMISTRY

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Freundlich adsorption isotherm is a plot of [ ]
   (a) Mass and Volume (b) Mass and temperature
   (c) Mass and concentration (d) Mass and concentration

2. The amount of heat evolved when 1 mole of any gas is adsorbed on a solid adsorbent surface is called [ ]
   (a) Entropy (b) Enthalpy (c) Heat of reaction (d) Enthalpy of adsorption

3. Polyesters belong to the _____ type of polymer [ ]
   (a) Addition, thermoplastic (b) Addition, thermosetting
   (c) Condensation, thermoplastic (d) Condensation, thermosetting

4. Cellulose acetate is a [ ]
   (a) Thermoplastic (b) Thermosetting plastic (c) Both (d) none

5. Solubility of calcium sulphate in water [ ]
   (a) Increase with rise of temperature (b) Decreases with rise of temperature
   (c) Remains unaltered with rise of temperature
   (d) Does not adopt any definite pattern with rise of temperature

6. Brakish water mostly contains dissolved [ ]
   (a) Calcium salts (b) Magnesium salts (c) Turbidity (d) Sodium chloride

7. If the substance is uniformly distributed throughout the body of a solid or a liquid, then it is called [ ]
   (a) Adsorption (b) Chemisorption (c) Physiorption (d) Absorption

8. The fibre obtained by the step polymerization of hexamethylene diamine and adipic acid is [ ]
   (a) Decarbon (b) Nylon (c) Rayon (d) Terylene

9. The only rubber which cannot be vulcanized is [ ]
   (a) Butyl rubber (b) Thiokol rubber (c) Neoprene (d) Nitrile

10. The common catalyst used in co-ordination chain polymerization [ ]
    (a) Nickel (b) Zeigler – Natta catalyst (c) Zeolite (d) Platinum

Cont.....2

II Fill in the Blanks

11. Stereospecific polymers are obtained by _____ polymerization.

12. In lime-soda process of softening, calcium and magnesium ions are precipitated as _____ and _____.

13. _____ in boilers produce wet steam.

14. _____ is used as an indicator in the determination of hardness by EDTA method.

15. $Al_2(S0_4)_3$ alum produce _____ as flocculant precipitates during softening water.

16. The presence of even small amounts of NaOH will cause _____ of boiler

17. Fullerenes are the examples of _____

18. Thiokol rubber is made by reaction between _____ and _____

19. Styrene rubber is a polymer of styrene and _____

20. Latex is the dispersion of _____ molecules.

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Code No: A109100105 **Set No. 3**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

I B.Tech. II Mid Examinations, March – 2011

ENGINEERING CHEMISTRY

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Polyesters belong to the _____ type of polymer [ ]
   (a) Addition, thermoplastic (b) Addition, thermosetting
   (c) Condensation, thermoplastic (d) Condensation, thermosetting

2. Cellulose acetate is a [ ]
   (a) Thermoplastic (b) Thermosetting plastic (c) Both (d) none

3. Solubility of calcium sulphate in water [ ]
   (a) Increase with rise of temperature (b) Decreases with rise of temperature
   (c) Remains unaltered with rise of temperature
   (d) Does not adopt any definite pattern with rise of temperature

4. Brakish water mostly contains dissolved [ ]
   (a) Calcium salts (b) Magnesium salts (c) Turbidity (d) Sodium chloride

5. If the substance is uniformly distributed throughout the body of a solid or a liquid, then it is called [ ]
   (a) Adsorption (b) Chemisorption (c) Physiorption (d) Absorption

6. The fibre obtained by the step polymerization of hexamethylene diamine and adipic acid is [ ]
   (a) Decarbon (b) Nylon (c) Rayon (d) Terylene

7. The only rubber which cannot be vulcanized is [ ]
   (a) Butyl rubber (b) Thiokol rubber (c) Neoprene (d) Nitrile

8. The common catalyst used in co-ordination chain polymerization [ ]
   (a) Nickel (b) Zeigler – Natta catalyst (c) Zeolite (d) Platinum

9. Freundlich adsorption isotherm is a plot of [ ]
   (a) Mass and Volume (b) Mass and temperature
   (c) Mass and concentration (d) Mass and concentration

10. The amount of heat evolved when 1 mole of any gas is adsorbed on a solid adsorbent surface is called [ ]
    (a) Entropy (b) Enthalpy (c) Heat of reaction (d) Enthalpy of adsorption

Cont.....2

II Fill in the Blanks

11. _____ in boilers produce wet steam.
12. _____ is used as an indicator in the determination of hardness by EDTA method.
13. $Al_2(S0_4)_3$ alum produce _____ as flocculant precipitates during softening water.
14. The presence of even small amounts of NaOH will cause _____ of boiler
15. Fullerenes are the examples of _____
16. Thiokol rubber is made by reaction between _____ and _____
17. Styrene rubber is a polymer of styrene and _____
18. Latex is the dispersion of _____ molecules.
19. Stereospecific polymers are obtained by _____ polymerization.
20. In lime-soda process of softening, calcium and magnesium ions are precipitated as _____ and _____.

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Code No: A109100105 **Set No. 4**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

I B.Tech. II Mid Examinations, March – 2011

ENGINEERING CHEMISTRY

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Solubility of calcium sulphate in water [ ]
   (a) Increase with rise of temperature (b) Decreases with rise of temperature
   (c) Remains unaltered with rise of temperature
   (d) Does not adopt any definite pattern with rise of temperature

2. Brakish water mostly contains dissolved [ ]
   (a) Calcium salts (b) Magnesium salts (c) Turbidity (d) Sodium chloride

3. If the substance is uniformly distributed throughout the body of a solid or a liquid, then it is called [ ]
   (a) Adsorption (b) Chemisorption (c) Physiorption (d) Absorption

4. The fibre obtained by the step polymerization of hexamethylene diamine and adipic acid is [ ]
   (a) Decarbon (b) Nylon (c) Rayon (d) Terylene

5. The only rubber which cannot be vulcanized is [ ]
   (a) Butyl rubber (b) Thiokol rubber (c) Neoprene (d) Nitrile

6. The common catalyst used in co-ordination chain polymerization [ ]
   (a) Nickel (b) Zeigler – Natta catalyst (c) Zeolite (d) Platinum

7. Freundlich adsorption isotherm is a plot of [ ]
   (a) Mass and Volume (b) Mass and temperature
   (c) Mass and concentration (d) Mass and concentration

8. The amount of heat evolved when 1 mole of any gas is adsorbed on a solid adsorbent surface is called [ ]
   (a) Entropy (b) Enthalpy (c) Heat of reaction (d) Enthalpy of adsorption

9. Polyesters belong to the _____ type of polymer [ ]
   (a) Addition, thermoplastic (b) Addition, thermosetting
   (c) Condensation, thermoplastic (d) Condensation, thermosetting

10. Cellulose acetate is a [ ]
    (a) Thermoplastic (b) Thermosetting plastic (c) Both (d) none

Cont.....2

II Fill in the Blanks

11. $Al_2(S0_4)_3$ alum produce _____ as flocculant precipitates during softening water.

12. The presence of even small amounts of NaOH will cause _____ of boiler

13. Fullerenes are the examples of _____

14. Thiokol rubber is made by reaction between _____ and _____

15. Styrene rubber is a polymer of styrene and _____

16. Latex is the dispersion of _____ molecules.

17. Stereospecific polymers are obtained by _____ polymerization.

18. In lime-soda process of softening, calcium and magnesium ions are precipitated as _____ and _____.

19. _____ in boilers produce wet steam.

20. _____ is used as an indicator in the determination of hardness by EDTA method.

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