

Gujarat Technological University

Diploma Engineering C to D Bridge Course Examination SUMMER-2015

Subject Code: C322301**Date: 08 /06 /2015****Subject Name: Polymer Chemistry****Time: 10:30 AM TO 12:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumption wherever necessary.
3. Each question is of 1 mark.
4. Use of SIMPLE CALCULATOR is permissible. (Scientific/Higher Version not allowed)
5. English version is authentic.

No. Question Text and Option.

- Polyacetal is also known as _____.
1. A. polyethylene B. polyoxymethylene
C. polyvinylchloride D. polycarbonate
- Nylon is a _____ material.
2. A. hygroscopic B. hydrophilic
C. hydrophobic D. amorphous
- Cooking utensils are made by _____.
3. A. silicone B. MF
C. PMMA D. Epoxy
- The reaction with carboxylic acid is called _____.
4. A. aminolysis B. acidolysis
C. hydrolysis D. Addition reaction
- Contact lenses are made by _____.
5. A. PVC B. PC
C. PP D. PMMA
- The reaction with amine is called _____.
6. A. hydrogenation B. aminolysis
C. Substitution reaction D. hydrolysis
- Teflon is the trade name of _____.
7. A. PTFE B. PP
C. PF D. PVC
- In hydrogenation reaction _____ catalyst is used.
8. A. Zn B. Mg
C. Co D. Ni
- Hexamethylenediamine is used for manufacturing process of _____.
9. A. Nylon 6 B. PC
C. PMMA D. Nylon6,6
- In melting temperature, a polymer starts _____.
10. A. solidify B. liquidity
C. melting D. rubbery
- Bisphenol-A is used in manufacturing process of _____.
11. A. nylon B. PC
C. polyacetal D. PE
- Hard and brittle state is known as _____ state.
12. A. rubbery B. glassy
C. solid D. liquid
- In bulk polymerisation, chain transfer agent is used to _____.
13. A. Heterogeneous phase B. Control the molecular weight
C. Glass transition temperature D. Melting temperature.
14. Bulk polymerization technique is used in the free radical polymerization of _____.

- A. PMMA
C. polycarbonate
Soft and rubbery state is known as _____ state.
15. A. hard
C. gas
B. flexible
D. solid
 T_g is used as a measure for evaluating the _____ of a polymer molecule.
16. A. brittleness
C. solidity
B. hardness
D. flexibility
In bulk polymerization, monomer is taken into _____ state.
17. A. solid
C. gas
B. liquid
D. aqueous
_____ gives an idea of the lowest and the highest molecular weight species.
18. A. Degree of polymerization
C. weight average molecular weight
B. Number average molecular weight
D. polydispersity
In emulsion polymerization, the monomer is dispersed in the _____ phase.
19. A. solid
C. liquid
B. gas
D. aqueous
Polymers starts flowing, this state is termed as _____ state.
20. A. viscoelastic
C. rubbery
B. viscofluid
D. glassy
Molecules have molecular weight ranging from _____.
21. A. 20000 to 40000
C. 500 to 1000
B. 0 to 10000
D. 100 to 2000
Depolymerisation is called _____ of a zip.
22. A. middle
C. closing
B. opening
D. first
 M_w/M_n ratio indicative of the extent of _____.
23. A. polydispersity
C. Degree of polymerization
B. weight average molecular weight
D. Number average molecular weight
Propagation step in polymerization is called _____ of a zip.
24. A. closing
C. opening
B. middle
D. last
_____ is an example of photo degradation.
25. A. PC
C. PMMA
B. PP
D. PE
Teflon can withstand temperature up to _____ degree C.
26. A. 600
C. 800
B. 500
D. 400
For all synthetic polymers, M_w/M_n ratio is higher than _____.
27. A. 0
C. 1
B. 4
D. 2
Polytetrafluorophenylene can withstand temperature up to _____ degree C.
28. A. 500
C. 400
B. 200
D. 100
Thermal degradation of polymers may follow either _____ or _____ route.
29. A. First, middle
C. Unzipping, random
B. Closing, opening
D. Middle, last
The deterioration in properties is due to phenomenon called polymer _____.
30. A. reaction
C. degradation
B. solution
D. dissolution
The full name of EBM is _____.
31. A. external brownian movement
C. glassy brownian movement
B. brownian movement
D. internal brownian movement
For symmetrical polymers, T_g is _____ proportional to T_m .
32. A. 2/1
C. 1/2
B. 4/5
D. 3/6

- Crystalline materials have ____ transparency.
33. A. low B. high
C. linear high D. slow
- IBM is ____.
34. A. brownian movement B. external brownian movement
C. internal brownian movement D. glassy brownian movement
- Amorphous materials have ____ transparency.
35. A. high B. middle
C. slow D. low
- HDPE is a ____ material.
36. A. crystalline liquid B. amorphous
C. opeque D. crystalline
- T_g is ____ proportional to T_m in unsymmetrical polymers.
37. A. $2/3$ B. $1/2$
C. $6/3$ D. $4/8$
- UHMWPE is a ____ material.
38. A. amorphous B. opeque
C. crystalline D. crystalline liquid
- In amorphous material, the termed as ____.
39. A. liquid. B. super cooled liquid.
C. crystalline solid. D. gaseous.
- PMMA is an ____ material.
40. A. amorphous B. crystalline liquid
C. crystalline D. opeque
- In ____ polymerisation technique, the product is obtained as spherical beads or pearl.
41. A. bulk B. liquid
C. suspension D. gas
- In crystalline material, the termed as ____.
42. A. super cooled liquid. B. crystalline solid.
C. gaseous. D. solid.
- Bulk polymerisation is used in polymerisation of ____ and ____.
43. A. Alcohol, ester B. Nylon, PC
C. liquid D. PMMA, styrene
- The milky white dispersion obtained at the end of emulsion polymerisation is called
44. ____.
- A. glycol B. latex
C. gypsum D. micelle
- Polymer is obtained in the purest form by ____ technique.
45. A. bulk B. liquid
C. suspension D. gas
- Only water-soluble monomers can be polymerised by ____ technique.
46. A. liquid B. suspension
C. gas D. solution
- Suspension polymerisation technique is also known as ____ polymerisation.
47. A. pearl B. solid
C. liquid D. emulsion
- Block co-polymers are also made by ____ technique.
48. A. bulk B. solution
C. suspension D. emulsion
- Very high molecular weight product is achieved by ____ technique.
49. A. solution B. suspension
C. emulsion D. bulk
- Emulsion polymerisation technique is used for ____.
50. A. paints and adhesives B. nitrogen gas
C. gas D. silicon resin
51. ____ is used as stabilizers for PVC.

- A. nylon
C. zinc octoate
- B. PS
D. PMMA
- Photo degradation is done in ____ polymer.
52. A. PMMA
C. PVC
- B. PS
D. nylon
- The reaction with water is called as _____.
53. A. acidolysis
C. aminolysis
- B. hydrogenation
D. hydrolysis
- Epoxidised vegetable oils are used as _____ for PVC.
54. A. stabilizers
C. bulk
- B. emulsifiers
D. solution
- Acidolysis reaction involves the _____ of the polymer molecule using acids.
55. A. starting
C. ending
- B. middle
D. splitting
- Melt spinning process is done in manufacturing process of _____.
56. A. Nylon 6.6
C. PE
- B. PS
D. PMMA
- _____ is used in manufacturing process of nylon 6,6.
57. A. NO₂
C. HCl
- B. Adipic acid
D. Carboxylic acid
- Zeigler process is used in manufacturing process of _____.
58. A. HCl
C. LDPE
- B. Adipic acid
D. Carboxylic acid
- Nylon word comes out from _____ and _____.
59. A. New York, USA
C. USA, London
- B. New York, London
D. USA, India
- In nylon 6,6 material, first 6 number indicates _____.
60. A. diamine
C. base
- B. acid
D. alkali
- MF resins are _____.
61. A. green in colour
C. colourless
- B. red in colour
D. yellow in colour
- In electrical equipments such as plugs, switches are made by _____.
62. A. UF
C. PMMA
- B. MF
D. epoxy
- In nylon 6,6 material, second 6 number indicates _____.
63. A. nitro
C. acid
- B. base
D. alkali
- UF resins are _____.
64. A. colourless
C. green in colour
- B. red in colour
D. yellow in colour
- The full name of T_f is _____.
65. A. glass temperature
C. fluid temperature
- B. melt temperature
D. flow temperature
- Visco-elastic state is also known as _____ state.
66. A. glassy
C. rubbery
- B. milky
D. flowing
- _____ is the short name of glass transition temperature.
67. A. T_g
C. T_c
- B. T_m
D. T_f
- Nocolac resin is used in manufacturing process of _____.
68. A. PC
C. PPO
- B. PPS
D. PF
- In polydispersity, molecules in _____ molecular weight.
69. A. same
C. different
- B. small
D. large

