

NIPER Question

1. Which is cytotoxic from following marine? (bryostatin)
2. To avoid crystallization of syrup which substance is added? (polyhydric alcohols)
3. Particle size of fluid energy mill is? (1-30micrometer)
4. Use of Gallic acid? (Antioxidant)
5. HLB of o/w emulsion. (3-8)
6. Range of Visible light? (400-800nm options were in micro so read questions carefully before attaining)
7. Source of IR (Nerst glower)
8. Hydrogen bonding determined by which method? (Raman)
9. Most intense peak in MASS spectra? (Base peak)
10. How to determine non-UV active structure? (derivatization)
11. Energy comparison of UV, IR n NMR. Means put them in ascending order of their energies. (NMR least)
12. Reference standard used in NMR? (TMS)
13. In IR calibration which substance is used? (Air)
14. What does RS means in IP? (Reference standard)
15. Sparingly soluble? (30 to 100 parts)
16. Cough is S/E of? (captopril)
17. Capsule '000' size capacity?
18. Green bones are made up of which type of gelatin? (type B)
19. Vehicle used in SGC?
20. Which property not related to polymorphism? (chemical assay)
21. Ostwald ripening is related with? (suspension)
22. Osmotic pressure of blood is?
23. Duration of nasal delivery
24. Duration of mucoadhesive delivery
25. Largest cotton producing country
26. Free trade port in India? (Kandla)
27. Amoebiasis is caused by? (E.histolytica)
28. In clock 12'o clock is north east then at 1:30pm what would be direction? (East)
29. In monosubstituted cyclohexane which structure will be stable?
30. Stereochemistry of Alanine
31. Linkage in amylase
32. Teratogenic vitamin? (A)
33. In cyclic carbohydrates stereochemistry is known as? (anomer)
34. Propranolol is contraindicated in? (Asthma)
35. Highest first pass metabolism of following?
a. propranolol (ans) b. digoxin c. Phenobarbital d. phenytoin
36. Which of this is cardiotoxic (Adriamycin)
37. M/A of paclitaxol is?

38. Therapeutic index denotes (Margin of safety)
39. Selective α_1 blocker is? (Prazosin)
40. Activity of receptor (drug selectivity and selective antagonist action of drug)
41. Receptors are made up of? (protein)
42. Cytokinins are?
43. Morphine act through μ receptor.
44. Nicotinic receptor work through which messenger system?
45. Example of Neurodegenerative disorder. (Alzheimer's Disease)
46. Action of Ach? (Hastens G.I. emptying)
47. Name of Indian Ginseng? (Withania Somnifera)
48. Father of Chemotherapy? (Paul Ehrlich)
49. Out of following which is not containing bacteria?
 - a. Soil b. Ice c. Dust d. Blood (ans) (blood is sterile unless infected)
50. Drug approved by US FDA for alopecia? (Minoxidil)
51. Drug interaction is hazardous of following? (terfenadin + erythromycin)
52. Which of following cause cardiac arrhythmia? (terfenadin)
53. β_2 selective (salbutamol)
54. Cerebral Malaria (quinine)
55. Which malaria is deadly? (P. falciperum)
56. Use of Primaquine is? (chloroquine resistant P. falciperum)
57. Tamoxifen used in breast cancer act as? (estrogen antagonist)
58. Metallic elements detected by? (AAS)
59. Enthalpy is measure of?
60. Luminescence, fluorescence and phosphorescence is a type of? (Emission spectroscopy)
61. Rate Kinetic deals with? (order, molecularity and conc of reactant)
62. In exothermic process increase in temp indicate what?
 - a. Reactant is more b. product yield is more(ans) c. Rxn stopped d. equilibrium
63. Cough syrup mostly contains which alkaloid? (Codeine)
64. Terpenoid are obtained from which biosynthetic pathway?
65. In diosgenin which ring is present?
66. In triterpenoid how many isoprene units are present? (6)
67. In dipeptide bond how many amino acids are present? (3)
68. Which of following contain chromosome or DNA?
 - a. mitochondria (ans) b. ER c. Golgibody d. cytoplasm
69. t-RNA function
70. Inhibition of mammalian gene expression is at the level of?
71. IPEC deals with?
 - a. Excipient (ans) b. US FDA c. GMP d. GLP (International Pharmaceutical Excipient Council)
72. ABC analysis deals with? (Inventory control)
73. Phase- IV deals with?
74. IND is for? (filling of NCE New Chemical Entity now changed to NME New Molecule Entity as biomolecules are not considered as chemical)

75. Minimum velocity required for laminar air flow unit? (100)
 76. Cardiac Ca⁺⁺ channel blocker? (nifedipine)
 77. Ca⁺⁺ channel use which type of messenger system?
 78. Fill in the gap: stu__ st__ ws__ vw (vwuvtu)
 79. Which of following is endothermic?
a. Adsorption b. crystallization c. vaporization d. all
 80. Betaine structure (Refer Wittig reaction)
 81. Structure of nifedipine.
 82. Stereochemistry in biphenyl
 83. How to determine unsaturation? (bromination,hydrogenation,ozonolysis)
 84. NMR signal obtained in 1,4- dioxane (1 peak)
 85. Reaction occurring in ethane? (E1)
 86. Tomato red pigment is due to? (Lycopene)
 87. Insulin act on which cells? (Beta)
 88. PG released by (COX-II)
 89. Aspirin is? (Irreversible COX inhibitor)
 90. Phenytoin used in? Digitalis induced arrhythmia)
 91. Serotonin is neurotransmitter
 92. Alcohol dehydrogenase converts (ethanol to acetaldehyde)
 93. Major product obtained from purine metabolism is? (Uric acid)
 94. Saffron cultivated in (Jammu n Kashmir)
 95. Benzyl alcohol 1% is used as Preservative
 96. Cetyl ether of Polyethylene glycon is known as? (Cetomacrogol)
 97. Detector used in spectrophotometer? (Photo multiplier tube)
 98. Living organisms are detected by? (Dark field microscopy)
 99. Which of following is not static? (Flash dryer)
 100. Rifampicin used not only in TB but also in? (Leprosy)
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01. Immunoglobulin is? (2 light, 2 heavy, disulfide)
 02. Which of following not causing enzyme induction? (Sulfonamide)
 03. Detector used in IR? (Thermocouple)
 04. Function of microvilli is? (Increase surface area)
 05. pH of 0.005M HCL?
 06. pH of pKa 5.4 is?
 07. IR range of CO (acid chloride)
 08. Neostigmin does not cross BBB? (Polar)
 09. Drugs which cross BBB are? (lipophilic drugs)
 10. Which is most commonly used HPLC? (Reverse Phase)
 11. Phenolphthalein is? (Acid base indicator)
 12. Drug assayed by acid-base back titration? (Aspirin)
 13. Which of following is titrated using strong base? (Refer IP for titrations, this can be considered as important)

14. Amiloride and Spiranolactone differs in?
15. Statin mechanism? (Reduce cholesterol)
16. Which of following is not related with enalapril (It is not an AT1 antagonist)
17. Equation of Angle of Repose.
18. Character of liposome is?
19. Eye drops and parenteral differ in?
20. Colchicines is used in Gout.
21. Omeprazole act by?
22. Muscarinic antagonist used in ulcer.
23. Most commonly used in PD? (L-dopa)
24. Dopamine agonist used in PD. (Bromocryptine)
25. Which of this is not acting on nuclear receptor? (Amino acid trypsin)
26. Nucleus present in coumarin.
27. Which of following is used in vascular disorder? (Ginko biloba)
28. Podophyllotoxin is? (Lignan)
29. Bacterial cell wall consists of? (Heteropolysaccharide)
30. In indole biosynthesis which AA is used? (Typtophan)
31. Sugar in protein preparation act as? (cryoprotective)
32. Non aq. Binder
33. Flow of genetic information (DNA to RNA to Protein)
34. Iodine Value
35. SDS-PAGE is used for? (Protein)
36. Yield calculation of synthesis.
37. Thermal assay (DSC)
38. Auxochrome function.
39. Supreme commander? (President)
40. Vant Hoff equation
41. Nitrites? (Vasodilation)
42. CH₃ F (deshielded so downfield)
43. Expiry date determined by use of drug along with container.
44. Which is most permeable to moisture? (Polyethylene)
45. Accelerated stability study is done at what temp n RH?
46. Dose required for intradermal delivery.
47. Aim of welfare state.
48. Solubilsation is based on (Stereochemistry)
49. Circular diachronism spectroscopy is used for? (Optically active compound)
50. Simple and compound interest calculation.
51. Digitalis acts by Na⁺ / K⁺ ATPase Pump
52. Syphilis is caused by?
53. Acetazolamide? (Carbonic anhydrase inhibitor)
54. Unit of delta(ppm)
56. HIV is caused by? (Virus)

Apart from this is contains many mathematical calculations, synonyms, antonyms and acronyms.

(And same paper is their for MBA and MS)

Note: In form they provide one option for sponsor seat do tick that option it do not require any industrial recommendation but it is one sort of payment seat. If you don't tick that option you will not be eligible for taking admission in payment seat.

Few useful acronyms.

1. CPCSEA- Committee for Purpose of Control and Supervision of Experimental Animals.
2. IAEC- Institutional Animal Ethics Committee
3. BEA-Breeding for Experimental Animals
4. SDS-PAGE Sodium Dodecyl Sulfate- Polyacrylamide Gel Electrophoresis
5. NME- New Molecular Entity
6. NCE- New Chemical Entity
7. GRAS- Generally Accepted As Safe
8. ANDA- Abbreviated New Drug Application (Generic filling)
9. IIG- Inactive Ingredient Guide

Note: Answers given in bracket is best of the options given. It might not be the most appropriate answer for that question. And don't rely on answer completely we have wrote what we were able to remember so please do check textbooks.

NIPER JEE 2005

flow injection system in HPLC?

fingerpoint region in IR?

trance stilbens?

alfa and beta d-glucose structure?

most suitable diluent for controlled release/

solvents in reverse phase chromatography?

RNA and DNA str?

reverse transcriptase enzyme?

chloroquin used in ..?

artemisin ?

asparaginase?

kaalfischer titration?

alkaloid which is not therapeutical active?

configuration of ephedrine/

endogenous anticoagulant?

Sulfonylureas?

what happend in type 2 daibetes?

efficacy and affinity?

What is nitric oxide?

type of Ca^{++} present in heart?

Action of dopamine?

antagonist of levodopa?

First law of thermodynamics/

cubic nature of NaCl?

mechanism of adaptogen/

NMR

UV calculation

mass calculation of fragments?

Diels-Alder reaction.

Find diastereomers?

route of administration?

gingival hyperplasia is a side effect of?

isoprene unit of FPP?

analytical technique of noble drugs?

stop codon?