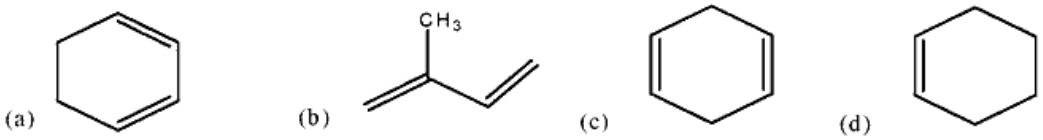
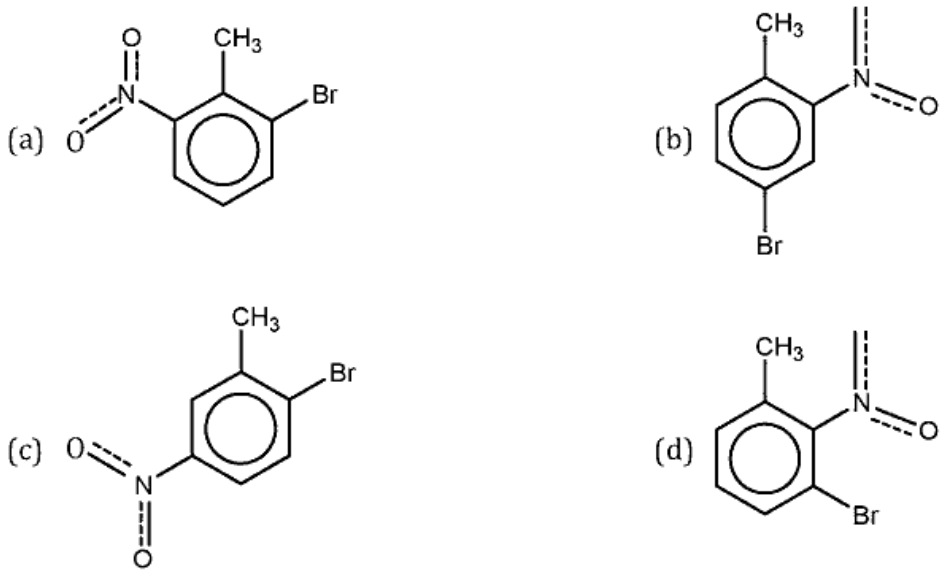
GPAT QUESTION PAPER 2017 WITH ANSWER KEY

1. In a free radical reaction, free radicals are formed at
   (a) Initiation step (b) Propagation step
   (c) Termination step (d) Both (a) and (b)
2. Which of the following dienes can undergo Diels–Alder reaction most readily



3. Separating techniques such as gas chromatography and liquid chromatography are not appropriate for separation of amino acids. Select correct reason from the following
   (a) Amino acids high polarity substances
   (b) Amino acids are low polarity substances
   (c) Amino acids are non polar substances
   (d) Amino acids lowly charges substances
4. When trans-2-butene is treated with bromine an anti-addition of bromine yields meso- 2,3- dibromobutane. Select the correct statement regarding the reaction from the following
   (a) The reaction is stereoselective as well as stereo specific
   (b) The reaction is stereoselective and not stereo specific
   (c) The reaction is nonstereoselective as well as non stereo specific
   (d) The reaction is stereo specific and not stereo selection
5. Reduction of imines to give amines in protic solvents can be carried out by one of the following reagents. Select the correct reagent
   (a) Sodium hydride
   (b) Sodium chloride and HCl
   (c) Lithium aluminium chloride
   (d) Sodium cyanoborohydride
6. In the reaction of 2-nitrotoluene with bromine in presence of iron, which of the product shownbelow is the most abundant (major) product



7. Which of the following cannot react as a nucleophile

(a) $(CH_3)_4N^+$ (b) CH_3NH_2

(c) $(CH_3)_2NH$ (d) $(CH_3)_3N$

8. Which of the following compounds will be oxidized by CrO_3 in acid

(a) 4-Methylcyclohexene (b) 3-Methyl 3-hydroxyclohexanone

(c) 4,4-Dimethyl-1-methyl-1,3-cyclohexandiol (d) 2-Methylcyclohexanone

9. Which of the following compounds absorbs at the longest wavelength

(a) 1,3,5-Hexatriene (b) 1,3,5,7-Octatetraene

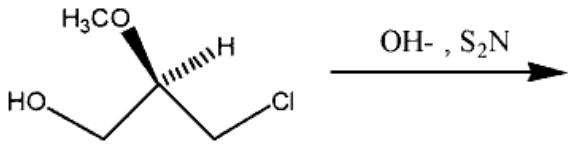
(c) 1,7-Diphenyl-1,3,5-heptatriene (d) 1,6-Diphenyl-1,3,5-heptatriene

10. Which of the following reagents will reduce a disubstituted alkyne to trans-alkene

(a) Na and NH_3 (b) $LiAlH_4$

(c) B_2H_6 (d) Pd and H_2

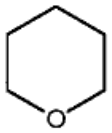
11. Which of the following statement is true about following reaction



(a) The product will not have a stereo center (b) The product will have R configuration

(c) The product will not have S configuration (d) The reaction will happen with racemisation

12. Which functional group is present in the molecule shown below



(a) Amide (b) Alcohol (c) Ester (d) Ether

13. Match the following agents that cause cancer with the preferable sites for where it might cause

1. Arsenic	(a) Prostate
2. Benzene	(b) Angiosarcoma
3. Cadmium Compounds	(c) Leukemia
4. Vinyl chloride	(d) Hemangiosarcoma

(a) 1 - d; 2 - c; 3 - a; 4 -b (b) 1 - b; 2 - a; 3 - c; 4- d

(c) 1 - c; 2 - d; 3 - b;4 - a (d) 1 - a; 2 - b; 3 -d; 4 - c

14. If the pKa of lidocaine is 7.9 and pH of the infected tissue is 8.9, the fraction of drug in the ionized form will be

(a) 10% (b) 1% (c) 90% (d) 99%

15. Which among the following are the salient features of Glucocorticoids

(a) Gets combined with highly specific cytosolic glucocorticoids

(b) They promote phagocytosis by macrophages

(c) Releases of lytic enzymes

(d) Increases lipid eicosanoids and prostaglandin gene

16. The most commonly used test of sensitivity to antimicrobial agent is

(a) Kirby- Bauer techniques (b) Immunodiffusion techniques

(c) Qudin procedure (d) Ouchter- Ion procedure

17. Bulk product is defined as

(a) Product completing all processing stages but not necessarily final packing

(b) A product ready for final dispatch

(c) Raw material used for making final dosage form

(d) A defined quantity of raw material from the same batch

18. Product,.....and Promotion are four 'P's of marketing

(a) Price and Place (b) Place

(c) Process (d) Production, Process, Price, Production

19. Insulin and thyroxin arrive at an organ / tissue / cell at the same time. Thyroxine causes an effect on the organ but insulin does not because

(a) The organ cell have receptors for thyroxine but not for insulin

(b) Thyroxin is a lipid -soluble hormone and insulin

(c) The target cell in the organ have up-regulated for

(d) Thyroxin is local hormone and insulin is a circula

20. Which among the following is an incorrect statement with regard to the drug Dantrolene

(a) It is a pyrazoline derivative (b) It is an imidazoline analogue

(c)It is a nitrophenylfurfurylidene derivative (d)It is a skeletal muscle relaxant

21. Diazepam is not suitable for peroral sustained release form since

(a) Is not absorbed in lower intestine

(b) It has biological half life greater than twelve effects hour

(c) It has biological half life less than one hour

(d) It has undesirable side effects

22. Antioxidant used as blocking agent in sterile product is

(a) Ascorbic acid esters (b) Sodium bisulphate

(c) Ascorbic acid (d) EDTA

23. Many mediators have been implicated in the asthmatic response. The clinical efficacyof pharmacologic intervention with inhibitors or antagonist of the mediators involves following category - except

(a) Platelet activating factors (b) Anticholinergics

(c) Antihistaminics (d) Cytokine inhibitors

24. Match the following adrenergic drugs with their receptor affinity

(1) Epinephrine (a) More alpha 1, no beta 1, beta 2 & dopamine

(2) Noradreanline (b) More alpha 1 & beta 1, less beta 2, no dopamine

(3) Phenylephrine (c) More beta 1 & Beta 2, no alpha 1 and dopamine

(4) Dobutamine (d) More alpha 1 & beta 1 , no beta 2 & dopamine

(a) a - 2; b - 4; c - 1; d -3 (b) a - 1; b - 3; c - 4; d- 2

(c) a - 3; b - 1; c - 2;d - 4 (d) a - 4; b - 2; c -3; d - 1

25. If the drug substance has been substituted wholly or in part by another drug orsubstance, it is called as

(a) Spurious drug (b) Adulterated drug (c) Misbranded drug (d) Mixed drug

26. One of the principle upon which HPLC detector functions is

(a) Redox property of solute is the basis for functioning of Electrochemical detectors

(b) Fluorimetric detector has high selectivity and low sensitivity

(c) Small difference in Refractive Index of mobile phase permit precise measurements in Refractive index detectors

(d) UV detector function based on its ability to detector

27. Methanolic extract of a crude drug powder when treated with magensium turnings and concentrated hydrochloric acid turned the solution magenta coloured. The test is termed as

(a) Shinodatest (b) Van Urk's Test

(c) Keller Killiani test (d) Vitali Morin Test

28. Etoposide and Teniposide are the semisynthetic derivatives of

(a) Myrrhabolic acid (b) Podophyllotoxin

(c) Abietic acid (d) Umbelliferone

29. The thymus secretes several hormones related to the immunity. These hormones promote the maturation of T lymphocyte cells. These hormones are

1. Thymosin
2. Thymichumoral factor
3. Thymic factor
4. Interleukins

(a) Only 1, 2 (b) 1, 2 and 3 (c) only 3 (d) Only 4

30. For the measurement of particle size of powders, the distance measured between two tangents on opposite sides of the particle parallel to some fixed direction is called

(a) Feret diameter (b) Martin diameter

(c) Projected area diameter (d) Edmundson diameter

31. Beta oxidation of fatty acids takes place in

(a) Mitochondria (b) Cytoplasm

(c) Nucleus (d) Choroplast

32. Which of the following genera is not the source for tropane alkaloids

(a) Datura (b) Duboisia

(c) Nicotiana (d) Atropa

33. The useful variable from in vitro dissolution test data for IVIVC includes

(a) t50 % - t63.2 (b) Sampling interval

(c) Sample volume (d) Volume of dissolution fluid

34. In respect of female reproductive cycle, which of the following statements are correct

1. The female reproductive cycle consists of menstrual phase, a pre-ovulatory phase,ovulation and a post ovulatory phase

2. During the menstrual phase, small secondary follicles in the ovary begin to enlargewhile the uterus is shedding its lining
3. During the pre-ovulatory phase, a dominant follicle continues to grow and begins tosecret estrogen and inhibin while the uterine lining begins to rebuild
4. Ovulation results in the release of an ovum and the shedding of the uterus lining tonourish and support the release ovum
5. After ovulation, a corpus luteum forms the ruptured follicles and begins to secreteprogesterone and estrogen, which it will continue to do throughout pregnancy if the eggis fertilized
6. If pregnancy does not occur, then the corpus luteum degenerates into a scar knownas corpus albicans and uterine lining is prepared to be shed again

(a) 1, 2, 3 and 6 (b) 2, 3, 4and 6
(c) 1, 2, 4 and 5 (d) 1, 4, 5 and 6

35. Apparent volume of distribution will be highest in case of the drug with % plasmaprotein binding
(a) 10 (b) 89 (c) 50 (d) 68

36. To rule out the probability of dose dumping from an oral CR dosage form, USP hasincluded which sampling time point for in vitro dissolution test where D is normal dosing interval
(a) 0.50D (b) 0.25D (c) 50-1.0D (d) 1.0-2.0D

37. Which of the following statement regarding cerebral hemisphere is true
(a) The right and left hemisphere are symmetrical
(b) This right more important for spoken and written language
(c) The left hemisphere is more important for musical and artistic awareness
(d) Hemispheric lateralization is more pronounced in male than in female

38. Which among the following is a Class-I method, used for rendering a solution of drug isotonic with body fluids
(a) Cryoscopic method (b) White-Vincent method
(c) Sprowlsmethod (d) Hammarlund method

39. (Weight in pounds/150) * Adult Dose = Child dose. The above formula is known as _____ in Posology
(a) Youngs formula (b) Dillings formula
(c) Clarkes formula (d) Frieds formula

40. The type of particle diameter obtained by microscopic method of evaluation is
(a) Projected diameter (b) Surface –volume diameter
(c) Volume - surface diameter (d) Stokes diameter

41. Naphazoline

(a) Is used for relief ofnasal congestion

(b) Exhibits peripheral beta-adrenoceptor stimulant

(c) Is a pyrazolinederivative

(d) Chemically, is 1H Imidazole, 3,4 -dihydro- 2 –(3-naphthylmethyl) monohydrochloride

42. A patient receiving warfarin develops rheumatoid arthritis. Which one of the following drugs would be Contraindicated

(a) Ibuprofen (b) Tolmetin (c) Aurothioglucose (d) Aspirin

43. A crude drug powder was heated with ferric chloride, water and concentrated hydrochloric acid followed by extraction with chloroform. The chloroform layer was treated with ammonia, the ammonical layer turned pink. The test indicates presence of_____ phytoconstitutent

(a) Anthraquinone-C-glycosides (b) Flavanones

(c) Cardiac glycosides (d) Saponin glycosides

44. The first vaccine was discovered by

(a) DeBary (b) Paul Ehrlich (c) Robert Koch (d) Edward Jenner

45. Type IV dissolution apparatus as per USP is

(a) Flow through cell (b) Paddle type apparatus

(c) Reciprocating cylinder (d) Paddle over dsk apparatus

46. Hoeppler viscometer is a type of

(a) Falling sphere viscometer (b) Capillary viscometer

(c) Cup and Bob viscometer (d) Cone and plate viscometer

47. Following are the list of various inherited metabolic disorders that can affect functioning of liver

a. Primary biliary cirrhosis

b. Glycogen storage disease

c. Gilbert's syndrome

d. Haemochromatosis

e. Wilson's disease

(a) a, b, c, d (b) b, c, d, e (c) a, c, d, e (d) a, b, d, e

48. In relation to buccal and sublingual route of administration which of the following statement is incorrect

(a) Absorption through epithelium is not affected by partition coefficient of the Drug

(b) Drug absorption by these routes by pass first pass metabolism

(c) There is an optimum log P for sublingual absorption

(d) These are preferred routes for anti-anginal drug

49. Which among the following statements describing surface activity for surfactants is incorrect

(a) Increase in length of hydrocarbon chain decreases surface activity

(b) Increase in ethylene oxide chain of polyoxy ethyl alcohol Increase in surface activity

(c) Increase in surface activity results in decrease length of hydrocarbon chain

(d) Relationship between hydrocarbon chain length andhydrphobicity

50. Surface tension is categorized as a/an _____ factor

(a) Capacity (b) Intensive (c) Extensive (d) Tolerance

51. Which of the following gums is obtained from endosperm

(a) Guar gum (b) Acacia gum (c) Tragacanth gum (d) Sterculia gum

52. High lightening differences among brands within the same product category is_____

(a) Product brand (b) Brand launch (c) Product differentiation (d) Branding

53. Hot stage microscopy is an important tool in preformulation studies for the study of

(a) Pseudopolymorphism (b) Paricle size measurement

(c) Microbial contamination (d) Compaction behaviour

54. In Bismuth subgallate suppositories B.P.C, when no strength of the drug is specified, B.P.C directs _____ bismuth subgallate per suppository

(a) 300 mg (b) 200 mg (c) 100 mg (d) 400 mg

55. The Michaehis-Menten hypothesis

(a) Postulates the formation of an enzymesubstrate complex

(b) Enables us to calculate the isoelectric point ofan enzyme

(c) States that the rate of a chemical reaction maybe independent of substrate concentration

(d) States that the reaction rate is proportional tosubstrate concentration

56. The largest gene in human is _____

(a) Dystrophin (b) Titin (c) Insulin (d) Phosphofructokinase

57. Which of the following techniques is not useful to detect polymorphs

(a) DSC (b) HPLC (c) PXRD (d) Melting point determination

58. Which of the following constituents is responsible for colour of shellac

(a) Shelloic acid (b) Laccaic acid (c) Aleurotic acid (d) All of the above

59. Match the following drugs with alteration they produces in structural-functional of kidney

(1) Aminoglycoside Anitibiotics (A) Glomerular abnormality

(2) ACE inhibitors (B) Tubalar epithelial cell Demage

(3) Methotrxate (C) Hemodynamic Mediated kidney injury

(4) NSAIDs (D) Obstructure nephrophathy

(a) 1 - B; 2 -C ; 3 - D; 4 -A (b) 1 - A; 2-B; 3 - C; 4- D

(c) 1 - C; 2-D; 3 - A; 4- B (d) 1 - D; 2-A; 3 - B; 4- C

60. Hixon Crowell's cube root law of dissolution states that

(a) There is a change in particle size and surface area during dissolution of drug

(b) Dissolution process is controlled by diffusion of molecules/ions

(c) High free energy of activation is required for solution

(d) Renewal of surface fluid layer around drug particle

61. All of the following statements regarding estrogen therapy in postmenopausal women are true EXCEPT

(a) It restores the loss of bone mass due to osteoporosis

(b) It may be useful to treat vasomotor symptoms

(c) Administration in a regimen including a progestin

(d) It is useful in the treatment of atrophic vaginities

62. Chapter IV of which law states that experiments on animals are avoided wherever it is possible to do so; as for example; in medical schools, hospitals, colleges and the like, if other teaching devices such as books, models, films and the. like, may equally suffice. Also, that experiments on larger animals are avoided when it is possible to achieve the same results by experiments upon small laboratory animals like guinea- pigs, rabbits, frogs and rats

(a) The prevention of cruelty to animal act,1960

(b) The Pharmacy Act, 1948

(c) Drugs and Cosmetics Act, 1940

(d) Medicinal and Toilet Preparations Act, 1955

63. Which among the following rules about spin - spin coupling and bond multiplicities are correct with regard to NMR spectra

(a) Coupling constant rarely exceeds 20 cps whilechemical shifts are over 1000 cps

(b) Spin - Spin interactions are dependent of strength of the applied field

(c) Coupling constants increase with distance

(d) Equivalent nuclei interact with each other to show interaction

64. Most accepted mechanism for developing bacterial resistance to sulphonamides is

(a) An alternative metabolic pathway for synthesis of essential

(b) An increasing capacity to metabolize the drug

(c) Increased antagonism of drug

(d) An alteration in enzyme that utilizes PABA

65. All the dopaminergic agonists having affinity for D2 receptors are clinically used in following conditions except

(a) Obsessive-compulsive disorder

(b) Hyperprolactinemia

(c) Acromegaly

(d) Parkinsonism

66. The labelling instruction "To be diluted 20 times its volume with water" indicates the dispensed product is a

(a) Mixture (b) Elixir (c) Linctus (d) Mouthwash

67. Which among the following is a structural variant of GABA and is used as a muscle relaxant

(a) Metocurine (b) Tybamate (c) Baclofen (d) Cyclobenzaprine

68. A steroidal phyto constituent lowering blood sugar is obtained from

(a) *Momordica charantia* (b) *Quillaja saponaria*

(c) *Dioscorea deltoidea* (d) *Glycyrrhiza glabra*

69. Which of the following drug is associated with the reaction of extreme photosensitivity

(a) Niacin (b) Digitalis (c) Tetracycline (d) Fluoroquinolones

70. Which among the following statements related to Ceric sulphate as oxidizing agent, as titrant are correct

(a) Ce (IV) during reaction exists as an anionic complex in media of sulphuric acid

(b) Ionic equation is $Ce^{3+} \rightarrow Ce^{2+} + e^{-}$

(c) Formal potential of Ce(III) Ce (II) couple is 1

(d) Ce (IV) does not permit use of HCl as reducing media

71. A labeled piece of DNA that is complementary to the sequence of DNA you are interested in, say the gene you are trying to put into cells, is called as

(a) A probe (b) A receptor (c) A epitope (d) A target

72. As per first schedule of Drugs and Cosmetics Act ,1940, following is name of the book under Siddha system of medicine

(a) Arka Prakasha (b) Yog Ratnakar (c) Nagamuni (d) Vrinda Chikitsa

73. Amantidine is helpful in Parkinson's disease because

(a) It liberates dopamine from nerve endings (b) It decreases cholinergic activity

(c) It is metabolized into dopamine (d) It increases adrenergic activity

74. An intermediate 3- Chloroaniline 4, 6 - disulphonamide on heating with formic acid yields a compound

(a) 6 chloro 2H -1,2,4benzothiadiazine 7 sulphonamide

(b) 3 chloro-2H 1,2,4- benzothiadiazine 7 sulphonamide

(c) Used in treatment of urinary tract infections

(d) Used as antibacterial

75. Acetyl Choline is hydrolyzed by enzyme

(a) Acetylase (b) Cholinase (c) Acetylcholinesterase (d) Transferase

76. Rubella virus is associated with disease

(a) Progressive encephalitis (b) Enterovirus infection

(c) Yellow fever (d) Brucellosis

77. Which among the following electronic systems are not involved in the origin of UV spectrum

(a) s and p shell electrons (b) sigma and pi electrons

(c) Charge transfer electrons (d) d and f shell electrons

78. Which of the following is not a thermoplastic resin

(a) Phenolic plastic resin (b) Polystyrene

(c) Polyethylene (d) Polypropylene

79. Choose the right combination from the following

(1) Diacytic stomata and sessile Trichome (A) Datuar

(2) Paracytic stomata and Unicellular and multi cellular (B) Vasaka

(3) Anomocytic stomata and Unicellular and multi cellular Trichome (C) Senna

(4) Anisocytic stomata and Multicellular covering trichome (D) Digitalis

(a) 1-B, 2-C, 3-D, 4-A (b) 1-C, 2-D, 3-A, 4-B

(c) 1-A, 2-D, 3-B, 4-C (d) 1-D, 2-B, 3-A, 4-C

80. Pharmaceutical alternatives possess

(a) Indentical therapeutic moiety/precursor but not in the same amount/dosage form

(b) Same amount of therapeutic moiety

(c) Same dosage form

(d) Same formulation ingredients in exactly same amount of dose

81. Topical application of timolol to the eye would be expected to induce which of the following

(a) Decreased formation of aqueous humor (b) Miosis

(c) Mydriasis (d) Increased outflow of aqueous humor

82. The major component of liquid glucose is .....and is prepared from _____

(a) Maltose, Pectin (b) Dextrin, Starch (c) Dextrose, Starch (d) Glucose, Starch

83. Which of the following formulations under ASU system are offered infinite period of shelf life in D and C Act

(a) Asava&Arishta (b) Churna (c) Ghutika (d) Kwatha

84. Which of the following is an example of hemiesters anionic surfactant for pharmaceutrical emulsions

(a) Sulfosuccinates (b) Sarcosinates (c) Taurates (d) Lactylates

85. The major differences between the prokaryotic and eukaryotic protein synthesis mechanisms are in which part of the process

(a) The initiation of synthesis (b) The chain elongation process

(c) The chain termination process (d) None of the above

86. In DNA replication the newly added nucleotide is joined to the growing DNA strand by an enzyme

(a) DNA polymerase (b) DNA ligase

(c) Restriction endonuclease (d) Reverse transcriptase

87. Glycosides are condensation products of

(a) Protein + aglycone (b) Sugar + Protein

(c) Sugar + aglycone (d) Fats + aglycone

88. Which of the following dosage form of digoxin will provide greater bioavailability based onvalue of F

(a) F equals 1.0 (b) F equals 0.32 (c) F equals 0.62 (d) F equals 0.77

89. The process by which the formed elements of blood develop is call as hemopoiesis. In the process of hemopoiesis the stem cells are converted in to myeloid stem cell and subsequently differentiated and are developed into precursor cells. Match the following precursor cells with the formed elements of blood from which they are formed.

(1) Reticulocyte	(A) Platelets
(2) Megakaryoblast	(B) Macrophages
(3) Myeloblast	(C) Erythrocytes
(4) Monoblast	(D) Neutrophils

(a) 1-C, 2-A, 3-D, 4-B (b) 1-A, 2-C, 3-B, 4-D

(c) 1-B, 2-D, 3-C, 4-A (d) 1-D, 2-B, 3-A, 4-C

90. Using Young's rule, calculate the dose for a 5 year old child if the adult dose is 340mg

(a) 200 mg (b) 100 mg (c) 400 mg (d) 800 mg

91. Which among the following statements on electro analytical methods are correct

(a) Measures conductance between two electrodes with AC powered Wheatstone bridge

(b) Polarography involves plotting of conductance – voltage

(c) Potentiometry involves application of Ilkovicequation

(d) Coulometry involving application of Nernst law relating equivalence between quantity of electricity passed and amount of compound generated at electrodes

92. Chemical interferences are common than spectral interferences due to

(a) Formation of compounds of low volatility (b) Ionization in flames

(c) Increase in rate of atomization (d) No shift in ionization equilibrium

93. Phase 0 studies means

(a) In vitro studies

(b) Part of phase I studies of clinical trials

(c) First in human microdosing studies

(d) Studies carried out on small number of animals

94. Condensation product of Ethyl isopentyl ester of diethyl malonic acid with urea and sodium ethoxide yields

(a) Amylobarbitone (b) Phenobarbitone

(c) Pentobarbitone (d) Quinobarbitone

95. Clavulanic acid is

(a) Inactivates bacterial - lactamase (b) Protien inhibitor of peptidoglycan synthesis

(c) Specific for gram negative bacteria (d) Inhibitor of 50S ribosomal subunit

96. The method by which different constituents of a liquid mixture can be separated without decomposition of the constituents is

(a) Distillation under reduced pressure (b) Molecular distillation

(c) Steam distillation (d) Fractional distillation

97. The preferred rheological behavior of Pharmaceutical suspensions is that of

(a) Pseudoplasticity and thixotrophy (b) Pseudoplasticity

(c) Dilatancy and thixotrophy (d) Pseudoplasticity and rheopexy,

98. An inventory turnover of ..... a year is considered satisfactory

(a) Four to six times, Six (b) To eight times

(c) One to two times (d) None of the above

99. The number of glucopyranose units in the structure of alpha cyclodextrins are

(a) 8 (b) 9 (c) 7 (d) 6

100. The compound 2 - (Diethylamino) ethyl [bicyclohexyl] - 1-carboxylate hydrochloride is

(a) Dicycloverine (b) Diphenhydramine

(c) Both nicotinic and specific antispasmodic, (d) Diagonistic agent for diagnosis of thyroid gland,

101. In new product development process, after analysis of business next step to be taken is _____

(a) Test marketing (b) Penetration marketing

(c) Brand marketing (d) Individual marketing

102. Which of the following alkaloid (form) is used to treat migrane

(a) VInca (b) Coca (c) Ergot (d) Belladonna

103. Free flowing powders show a flatter cone and have _____

(a) Smaller angle of repose (b) Larger angle of repose,

(c) Intermediate angle of repose (d) None of the above,

104. The WIPO is the specialized agency of the United Nations. It promotes protection of _____throghout the world

(a) Intellectual properties (b) World properties

(c) Pharmaceutical organizations (d) Finace companies

105. Herpesviruses are large encapsulated viruses that have double stranded DNA genome thatencodes approximately 70 proteins. It causes acute infection followed by latent infection in which virus persist in noninfectious form with periodic reactivation and shedding of infectious virus. Following are the examples of such herpesvirus –except

(a) Epstein-Barr Virus (b) Herpes simplex

(c) Varicella Zoster (d) Cytomegalovirus

106. A fatty acid not synthesized in human body and has to be supplied in diet is

(a) Stearic acid (b) Oleic acid (c) Palmitic acid (d) linolenic acid

107. Chemical class of drugs that are susceptible to oxidation are

(a) Esters (b) Lactam (c) Sterols (d) Carbamates

108. The only analgesic acting centrally is _____

(a) Methadone (b) Naloxane (c) Tramadol (d) Naloxane

109. Neuropathy is adverse effect of

(a) Isoniazid (b) Ethambutol (c) Pyrazinamide (d) Dapsone

110. As per I.P. if the solubility range of a solute is 30 to 100 parts, it will be

(a) Soluble (b) Freely soluble (c) Sparingly soluble (d) Slightly soluble

111. SDS is used in PAGE of a mixture of proteins for their efficient separation on the gel. SDS, in the experiment is used to _____

(a) Have uniform charge density on the proteins (b) Stabilize the proteins

(c) Decrease the surface tension of buffer (d) Solubilize the proteins

112. Indicate which of the following statements is true

(a) A weakly acidic drug is unionised when pH of the solution is at last 2 pH units below its pKa

(b) Acidic drugs are noninonized at pH 9

(c) Acidic drugs are less soluble in alkaline solution

(d) The higher the pKaof a weak acid, the stronger is acid

113. Dissemination of cancer occurs through one of the following pathway - except

(a) Migration (b) Direct seeding (c) Lymphatic spread (d) Hematogenous spread

114. Which of the following alkaloids has hypotensive activity

(a) Emetine (b) Quinine (c) Reserpine (d) Papaverine

115. Which of the following is a characteristic of cytochrome P-450

(a) Catalyzes aromatic and aliphatic hydroxylations

(b) Located in the lipophilic environment of mitochondrial membrane

(c) Catalyzes O-, S-, N methylation reactions

(d) Catalyzes conjugation reactions

116. The Michalis-Menten equation for standard for saturated active transport system is-

(a) $V_{max} = k_{cat}[E_0]$ (b) $V_{max} = k_m$ (c) $V_{max} = k_m[S]$ (d) None

117. Which among the following describe the characteristic features of Tetracyline

(a) Undergoes epimerization in solutions having intermediate pH range

(b) Forms Anhydroustetracycline in presence of acidic

(c) Forms Minocycline in basic medium

(d) Forms stable chelate complexes with potassium ions

118. Cells that contribute for immune system are

1. T Lymphocytes
2. Eosinophil
3. B Lymphocytes
4. Dendritic cells
5. Erythrocytes
6. Natural killer cells

(a) 1, 3, 4 and 6 (b) 1, 2, 4 and 6

(c) 1, 3, 5 and 6 (d) 1, 2, 5 and 6

119. Dielectric constant of Ethanol at room temperature is almost equal to

(a) 24 (b) 48 (c) 54 (d) 72

120. Foaming during liquid filling can be reduced by following ways, except

(a) Increase in speed of the filling line (b) Minimised product turbulence

(c) Closed system filling (d) Defoaming device

121. If the excitation energy of the resonance level is 2.10 eV (when hc=12,330) then the wave-lengthof resonance line of sodium atoms is _____

(a) 577.2 nm (b) 587.2 nm (c) 567.2 nm (d) 597.2 nm

122. After vascular injury, platelets encounter extracellular matrix constituents such as collagen and adhesive glycoprotein. On contact with these proteins platelets undergo

1. Adhesion
2. Secretion
3. Aggregation
4. Degradation

(a) 1, 2 and 3 (b) 1, 2 and 4 (c) 1, 2, 3 and 4 (d) 1, 2 and 4

123. A reporting relationship in which an employee receives orders from, and reports to, only one supervisor is known as _____

(a) Unity of command (b) Centralisation

(c) Decentralisation (d) Line of authority

124. In humans end product of purine catabolism is

(a) Uric acid (b) Urea (c) Purine oxide (d) Xanthine

125. Which of the following adverse effects is caused by thioridazine

(a) Tardive dyskinesia (b) Constipation

(c) Orthostatic hypotension (d) All of the above

ANSWER KEY GPAT 2017

1-d	2-a	3-a	4-a	5-d	6-b	7-a	8-c	9-d	10-a
11-a	12-d	13-a	14-c	15-a	16-a	17-a	18-a	19-b	20-a
21-b	22-a	23-a	24-a	25-a	26-a	27-a	28-b	29-b	30-a
31-a	32-c	33-a	34-a	35-a	36-b	37-c	38-a	39-c	40-a
41-a	42-d	43-a	44-d	45-a	46-a	47-b	48-a	49-a	50-b
51-a	52-c	53-a	54-c	55-a	56-a	57-b	58-b	59-a	60-a
61-a	62-a	63-a	64-a	65-a	66-d	67-c	68-a	69-c	70-a
71-a	72-c	73-a	74-a	75-c	76-a	77-a	78-a	79-a	80-a
81-a	82-c	83-a	84-a	85-a	86-a	87-c	88-a	89-a	90-b
91-a	92-a	93-c	94-a	95-a	96-b	97-a	98-a	99-d	100-a
101-a	102-c	103-a	104-a	105-a	106-d	107-c	108-a	109-a	110-c
111-a	112-a	113-a	114-c	115-a	116-a	117-a	118-a	119-a	120-a
121-b	122-a	123-a	124-a	125-d					