GPAT QUESTION PAPER 2016 WITH ANSWER KEY

1. What is the Carr's index of good flow powder property
   (a) 5-15 (b) 12-16 (c) 18-21 (d) 28-35
2. Which microorganism is involved in the assay of Rifampicin
   (a) Bacillus subtilis (b) Micrococcus luteus (c) Bacillus pumilus (d) Bacillus cereus
3. Which percentage of dextrose is isotonic with the blood plasma
   (a) 5% (b) 10% (c) 15% (d) 20%
4. What is the biological source of Alexandrian Senna
   (a) Cassia aungustifolia (b) Cassia acutifolia
   (c) Cassia Bravifolia (d) Cassia Nerifolia
5. HLB of SPAN and TWEEN surfactants may be obtained from which of the following equations
   (a) HLB = E/5
   (b) HLB = (E+P)/5
   (c) HLB = 20 [(1- S)/A)]
   (d) HLB = (hydrophilic group numbers)- (lipophilic group numbers)+7
6. If the given drug is absorbed by passive what will be its absorption kinetics
   (a) Zero Order (b) First Order
   (c) Second order (d) Pseudo-zero Order
7. Which of the following is delayed type of her sensitivity reaction
   (a) Arthus reaction (b) Penicillin sensitivity
   (c) Tubercullin sensitivity (d) ABO incompatibity
8. Which of the following is NOT suitable as a post-coital contraceptive
   (a) Levonorgestrel 1.5mg (b) Ulipristal acetate 30 mg
   (c) Mifepristone 10-25 mg (d) Mestranol 1.5 mg
9. Which of the following properties are characteristics of tannis
   (P) They give a precipitate with alkaloids
   (Q) They give a yellow of bluish red color with iron(III) chloride
   (R) They transform hide into leather
   (S) They give a pale-pink precipipate with iodine
   (a) P, Q, S (b) P and Q (c) P and R (d) Only Q
10. Adverse drug Event reporting in the responsibility of all of the following EXCEPT
    (a) Pharmacist and physician (b) Manufacturer
    (c) Consumer (d) Regulatory authorities
11. Time dependent dilatant behavior is knows as
    (a) Thixotrophy (b) Rheopexy (c) Rheomalaxis (d) Plastic
12. Chairman of DTAB is:
    (a) Health minister of India (b) Director general of Health services
    (c) Drug controller of India (d) President of AICTE
13. Plasmodesmata is:
    (a) Lignified element (b) Vascular element
    (c) Very fine protoplasmic thread (d) None

14. Efficiency of drug is checked in modest population in
    (a) Clinical trail-phase1
    (b) Clinical trail-phase2
    (c) Clinical trail-phase3
    (d) Clinical trail-phase4
15. Which of the following statements is correct for gram positive becteria
    (a) Cell wall has a thin peptidoglycan layer
    (b) Cell wall lipid content is very low and smaller volume of periplasm
    (c) Lipopolysaccharide layer is present
    (d) Teichoic acid is present
16. The terms upper consulate temperature and lower consulate temperature are related to which phenomenon
    (a) Cloud point
    (b) Critical solution temperature
    (c) Kraft point
    (d) Phase inversion
17. Match the alkaloids with their synthesis precursors.

(1) Pilocarpine	(P) Necleotide
(2) Connine	(Q) Tryptophan
(3) Caffine	(R) Histadine
(4) Yohimbine	(S) Acetate derived

    (a) 1-S, 2-R, 3-P, 4-Q
    (b) 1-S, 2-Q, 3-P, 4-R
    (c) 1-P, 2-R, 3-S, 4-Q
    (d) 1-R, 2-S, 3-P, 4-Q
18. Which one of the following is a solid dosage form excipient which can play the role of a diluent, a disintegrant, a glidant, a lubricant and a pore/ channel former.
    (a) Lactose
    (b) Microcrystalline cellulose
    (c) Ethyl cellulose
    (d) Eudragit RL 100
19. What is the required floor area for running a pharmacy for wholesale or distribution
    (a) 6 sq meters
    (b) 10 sq meters
    (c) 15 sq meters
    (d) 30 sq meters
20. Bioavailability differences among drug's oral formulations are most likely to occur if it
    (a) Is freely water soluble
    (b) Is incompletely absorbed
    (c) Is completely absorbed
    (d) Undergoes little first-pass metabolism
21. Match the drug with their receptor profiles

(1) Ergotamine	(P) 5-HT_{2A} antagonist
(2) Ondansetron	(Q) 5-HT_1 partial agonist /antagonist
(3) Sumartriptan	(R) 5-HT_3 antagonist
(4) Ketanserin	(S) 5-HT_{1D} agonist

    (a) 1-R, 2-S, 3-Q, 4-P
    (b) 1-Q, 2-R, 3-S, 4-P
    (c) 1-R, 2-S, 3-P, 4-Q
    (d) 1-S, 2-R, 3-P, 4-Q
22. What strategy of drug design is frequently used on complex lead compounds derived from natural products
    (a) Extension
    (b) Simplication
    (c) Rigidication
    (d) Conformational block
23. Which type of photon detector is commonly microfabricated into arrays of 500 or More individual detectors
    (a) Photocell
    (b) Phototube
    (c) Photumultiplier tube
    (d) Photodiode

24. Which of the following is a phjse II drug metabolism reaction associated with genetic polymorphism
    (a) Glucuroinidation
    (b) Acytylation
    (c) Reduction
    (d) Glutathione conjugation
25. A gram-negative diplococcus associated with urinary tract infection , pelvic inflammatory disease and conjunctivitis, meningitis is
    (a) Neissria gonorrhoeae
    (b) Chlamdia Trachomatis
    (c) Hemophilus influenza
    (d) Streptococcus pneumoniae
26. Pregnancy test kits are designed to detect
    (a) Estrogen
    (b) Human chorionic gonadotropin
    (c) Follicle-stimulating hormone
    (d) Luteinizing hormone
27. Drug Z is a depolarizing neuromuscular blocking agent effective for the treatment of pinworm. Identify drug Z
    (a) Phyrantel
    (b) Paramomycin
    (c) Integrase
    (d) Protease
28. Metheneamine used for UTI is a prodrug. How and to what is is converted into
    (a) At low pH of Urine, to formaldehye
    (b) At high pH of urine, to aminosalicylic acid
    (c) At low pH of Urine, to amonosalicylic acid
    (d) At high pH of urine,to formaldehye
29. The correct order for the basic features of a mass spectrometer is
    (a) Acceleration, deflection, detection, ionization
    (b) Ionization ,Acceleration, deflection, detection
    (c) Acceleration, ionization, deflection, detection
    (d) Acceleration, deflection, ionization, detection
30. Match the following enzymes/protein with specific functions in DNA replication
    (1) Helicases
    (P) Processive unwinding of DNA
    (2) DNA Primses
    (Q) Seals the single strand
    (3) DNA ligases
    (R) Relieves torsional strain
    (4) Topiosomerases
    (S) Initates synthesis of RNA Primers
    (a) 1-P, 2-Q, 3-R, 4-S
    (b) 1-P, 2-S, 3-Q, 4-R
    (c) 1-S, 2-Q, 3-P, 4-R
    (d) 1-P, 2-Q, 3-R, 4-S
31. Which is the first line drug for the treatment of generalized seizures
    (a) Valproic acid
    (b) Anhydortetracycline
    (c) Carbamazepine
    (d) Doxycycline
32 Tetracyline in basic solution is usstable and forms which product
    (a) Epithtracycline
    (b) Anhydrotetracycline
    (c) Isotetracycline
    (d) Doxycycline
33. The location of the blood-brain barrier is considered to be
    (a) At the level of the brain capillaries
    (b) At the level of gila
    (c) At the level of neorons
    (d) At the level of dendrites
34. The following drug metabolizing reaction in entirely non-microsomal:
    (a) Glucuronide conjugation
    (b) Acetylation
    (c) Oxidation
    (d) Reduction
35. Which of the following methods is used to determine whether a process functions properly for its intended use
    (a) Capacity
    (b) Inspection
    (c) Validation
    (d) Design Review

36. Match product, source and plant part form which they areobtained

(1) Bacosides	(P) Aciacia catechu	(i) Herb
(2) Cutch	(P) Rubiatictorium	(ii) Leaf
(3) Henna	(R) Bacopamonnieri	(iii) Root
(4) Alizarm	(S) Lawsoniainternis	(iv) Stem

(a) 1-R-ii, 2-S-I, 3Q-Q-iii, 4-P-iv
(b) 1-R-I, 2-P-iv, 3-S-ii, 4-Q-i
(c) 1-Q-ii, 2-P-iii, 3-S-iv, 4-R-I
(d) 1-S-ii, 2-R-iv, 3-P-I, 4-Q-i

37. What is the significance of term overfill
(a) It is similar to overage
(b) It is the excess volume to be field in containers as vials, ampoules to avoid loss by degradation
(c) It is the excess filing of container as vials, ampoules to avoid the loss during case
(d) It is violation of packaging regulation as per GMP

38. Identity the false statements
(a) A characteristics of drugs eliminated by zero order kinetic process is that the half –life is not constrains
(b) The plasma drug concertation versus time curve for a drug eliminated by zero order kinetics linear
(c) A fundamental characteristics of all first order pharmacogenetics processes is that the rate of the process is proportional to drug concentration
(d) A characteristics of absorption by lipid diffusion is its saturability at high drug concentrations

39. 2', 3'-Didehydro-3'-deoxy thymidine is the chemical name of which of following antiviral agents
(a) Didenosine (b) Zidovudine (c) Stavudine (d) Zalcitabine

40. Oseltamivir is antiviral drug. It produces its action by inhibiting which enzymes
(a) DNA polymerase
(b) Neuraminidase
(c) Praziquantel
(d) Ivermectin

41. In NMR spectrum, a signal is observed as triplet. What will be the ratio of relative peak areas in this signal
(a) 1:1:1 (b) 1:2:1 (c) 1:3:1 (d) 1:4:1

42. Which problem can arise if the material to be compressed into tablet tends to adhere to die walls
(a) Picking (b) Sticking (c) Capping (d) Marbling

43. What is the half life of Tc-99m
(a) 66 years (b) 66 hours (c) 6 hours (d) 60 minutes

44. Eudragits are
(a) Phthalate polymers
(b) Cellulose polymers
(c) Acrylate polymers
(d) Amide polymers

45. Drugs (price control) order 1995 and related orders form time to time are enforeced by
(a) NPPA (b) CSIR (c) DBT (d) ICMR

46. Match the drugs with plant from which they are isolated and their families

(1) Artemisinin	(P) Periwinkle	(i) Dioscoreaceae
(2) Diosgenin	(Q) May apple	(ii) Apocynaceae
(3) Etoposide	(R) Sweet wormwood	(iii) Berberidaceae
(4) Vinblastine and Vicnristine	(S) Maxican wild yam	(iv) Asteraceae

(a) 1-R-iv, 2-S-i, 3-Q-iii, 4-P-ii
(b) 1-s-iv, 2-R-i, 3-Q-iii, 4-P-ii
(c) 1-Q-iii, 2-R-ii, 3-Q-i, 4-P-iv
(d) 1-R-iv, 2-S-iii, 3-Q-i, 4-P-ii

47. Which of the following is an irreversible phenomenonralated to stability of emulsion
    (a) Craking
    (b) Creaming
    (c) Coalescence
    (d) Flocculation
48. If a drug is highly bound to plasma proteins, what might be its reason or consequence
    (a) It most likely carried by α-glycorprotien
    (b) It has a high renal clearance
    (c) It has a large Vd
    (d) It is a likely candidate for drug interactions
49. In order to make a generic substitution ; a pharmacist must do also act as a hydrogen bond acceptor
    (a) Notify the patient of the substitution
    (b) Charge the same or lower price for the generic
    (c) Place the brand name on the label and write "substitute for"
    (d) Obtain the physician's consent to substitute the product
50. Which of the following groups can form ionic interactions and also act as a hydrogen bond acceptor
    (a) Hydroxyl group (OH)
    (b) Carboxylate group (RCOO)
    (c) Aminononium group (RNH^{3+})
    (d) Ketone (C=O)
51. Which of the following drug does not give pink colour with ruthenium red
    (a) Agar (b) Guar gum (c) Pectin (d) Isabgol
52. The IUPAC name, 4-Amino-N(5,6-dimethoxy-4-pyrimidinly) benzenseulfonamide belong to which generic drug
    (a) Sulfadimidine (b) Sulfadoxine (c) Sulfalene (d) Sufamerazine
53. Method of inspections used to determine the absorption rate constants. It assumes that
    (P) Ka is at least five time grater activities
    (Q) Absorption in complete (i.e. > 95% complete) at the time of peak concentration
    (R) Both Absorption and elimination are first order processes
    (a) P and Q (b) Q and R (c) Q and R (d) P and R
54. The clinical trial registry in India is maintained by
    (a) World health organization, Delhi
    (b) Indian council of medical research , New Delhi
    (c) Institute of Clinical Research, New Delhi
    (d) Central drugs standard control Organization, New Delhi
55. What is the correct order for unsaturation in following fatty acids
    (1) Palmitoleic Acid
    (2) Linolenic
    (3) Linoleic acid
    (4) Arachidonic acid
    (a) 1>2>3>4 (b) 3>4>2>1 (c) 4>3>2>1 (d) 4>2>3>1
56. Which of the following is an example of Diaz onium ion
    (a) $CH_3^+N_3^-$ (b) $CH_3N_2^+$ (c) $H_2N\text{-}NH_3^+$ (d) None of these
57. Which term describes 'The degree to which a set of inherent properties of a product system , of rocess fulfils requirements, the best'
    (a) Standard (b) Quality (c) Quality objective (d) State of control
58. What will be AUC value of lidocaine if the administered dose is 0.2 g and the total body clearance is 45 L/h
    (a) 4.44 h.mg/L (b) 0.0044 h.mg/L (c) 9.00 h.gm/L (d) 9000 h. mg/L

59. Toluene is converted of which compound in presence of CrO_3 with acetic anhydride
(a) Benzyl alcohol (b) Benzaldehyde
(c) Benzoic acid (d) Benzoin

60. Match the antimalarial drugs with their modes of action
(1) Artemisinin (P) Inhibition of parasite mitochondrial electron Tranport
(2) Pyremethamine (Q) Inhibition of heme polymerase
(3) Quinine (R) Generation of oxygen and carbon- centered redicals
(4) Atovaquone/Proguanil (S) Inhibition of dihydrofolate reductase
(a) 1-P, 2-S, 3-Q, 4-R (b) 1-Q, 2-S, 3-P, 4-R
(c) 1-S, 2-R, 3-Q, 4-P (d) 1-R, 2-S, 3-Q, 4-P

61. Methyl ether of erythromycin is .....
(a) Clarithromycin (b) Dirithromycina
(c) Azithromycin (d) Mithramycin

62. Ebullioscopicmethod is based on which of the following observation
(a) Freezing point depression (b) Boiling point elevation
(c) Osmotic pressure change (d) None of the above

63. How many fundamental svibrations can be expected for C_2H_3CL
(a) 7 (b) 11 (c) 14 (d) 18

64. Which of the antibodies provide passive immunity to newborn baby
(a) IgG (b) IgM (c) IgA (d) IgE

65. Increased number of number mitosis may be present in the following tissue EXCEPT
(a) Bone marrow cells (b) Nails (c) Hepatocytes (d) Intestinal Cells

66. To which chemical class the vinca alkaloids belong
(a) Tropane (b) Indole (c) Tryptopha (d) Purine

67. An antibiotic thatn resembles the 3' end of a charged tRNA molecule is
(a) Streptomycin (b) Vincamycin (c) Puromycin (d) Tetracycline

68. If the cohesive forces in between similar molecules are less than the adhesive forces between dissimilar\ molecules, a deviation in Raolt's law is observed . here witch deviation will be seen.
(a) Positive (b) Negative
(c) Absent (d) Either positive or negative

69. Phenylalanine, a precursor of most of the phenolics is higher plants is a product of which one of the following pathways
(a) Shikimic acid pathway (b) Malonic acid pathway
(c) Mevalonic acid pathway (d) Methylerhtritol pathway

70. Within how many days a pharmacist should dispense diluted aqueous mixtures
(a) 7 days (b) 14 days (c) 21 days (d) 30 days

71. What molecular feature is penicillin G is said o mimic
(a) Disaccharide of N-acetylmuranicanidN- actylgulcosamine
(b) N-acetylneuraminic acid
(c) The pentapeptide moiety of five glycine units
(d) The dipeptide moiety D-ala-D-Ala

72. If a drug is known to be distributed into total body water, how many milligrams are needed to obtain an initial plasma level of 5mg/L in a patient weighting 70 kg
(a) 210 (b) 150 (c) 50 (d) 35

73. What does 'pharmacokinetical compartment' mean
(a) Part of the body water which is located is the vascular system
(b) Total body water
(c) Plasma, intracellular fluid, together , anatomical water compartments where drug is absorbed
(d) Part of the body water in which the change of a drug concentration has the same kinetics

74. The resistance to macrolide antibiotics by of gram positive organism is developed due to
(a) Decreases uptake of antibiotics
(b) Synthesis of esterase enzyme that hydrolyzes lactone ring of macrolide
(c) Methylation of 50S subunit at the antibiotic binding site
(d) Increased metabolism of antibiotic

75. The ethanolic solution contaminated with benzele showed absorbance of 0.69 at 260 nm in a 2 cm cell if the molar absorptivity of benzene in thanolis 230 $M^{-1}cm^{-1}$, what is the concentration of benzene in the solution
(a) 0.003 M (b) 0.0015 M (c) 0.001M (d) 0.015M

76. The most effective agent for treating psychosis would be
(a) Buspirone (b) Sertaline
(c) Dextroamphetamine (d) Olanzapine

77. TGA is regulatory body of which country
(a) Europe (b) Australia (c) Canada (d) UK

78. Which prostaglandins have a keto function at C-9 and a α- Hydroxyl group at C-11 in prostanoic acid backbone
(a) PGA (b) PGI (c) PGE (d) PGF

79. When morphine is heated at 140°C under pressure, with strong HCL, it converts pnto:
(a) Morphinone (b) Apomorphine
(c) Codeine (d) Oxymorphine

80. All of the following are gram-negative rods EXCEPT
(a) Clostridium (b) Escherichia (c) Salmanella (d) Shigella

81. The cells which secrets male sexhormone testosterone are:
(a) Crypts of lieberkuhn (b) Escherichia
(c) Salmonella (d) Shigella

82. If QA and QC are compared
(a) Both are literally the same
(b) QA is a higher activity in the management hierarchy
(c) QA is a higher activity in the management hierarchy
(d) QA is a done by the production person and QC is done by analyst

83. Bio availability of drug refers to
(P) The ratio of drug excreted unchanged in urine to that excreted as metabolites
(Q) Fraction of the drug reaching the target to produce the action
(R) The length of time an administered drug is available for action
(S) Percentages of administered dose that reaches systemic circulation in the unchanged form
(a) Only P (b) Q and R
(c) R and S (d) Only S

84. Following intravenous administration, drugs are distributed fastest to
(a) The skin, kidney, and brain (b) The liver, kidney, and brain
(c) The liver, adipose, and brain (d) The liver, kidney, and adipose

85. Which of the following agents act as hypoglycemic as ATP sensitive potassium channel blocker
(a) Mitiglinide (b) Pioglitazone
(c) Liraglutide (d) Sitagliptin

86. Carabilide shows stongs IR absorption in which of the following range in cm^{-1}
(a) 3200-3600 (b) 1640-1690
(c) 1000-1300 (d) 2210-2260

87. Match the drugs with their adverse effects

(1) Cyclophosphamide	(P) Pulmonary fibrosis
(2) Doxorubicin	(Q) Nephrotoxicity, ototoxicity
(3) Bleomycin	(R) Acute hemorrhage cystitis
(4) Cisplatin	(S) Cardiotoxicity

(a) 1-S, 2-R, 3-P, 4-Q (b) 1-P, 2-Q, 3-S, 4-R
(c) 1-P, 2-S, 3-Q, 4-R (d) 1-R, 2-S, 3-P, 4-Q

88. Which one of the following technique is used to determine glass transition temperature
(a) X-ray diffractometry (b) Raman spectroscopy
(c) Differential scanning calorimetry (d) Atomic forced microscopy

89. Match the schedules with the particulars they describe

(1) Schedule T	(P) Standards for patent or proprietary medicines
(2) Schedule U	(Q) Requirements/ guidelines to import &/or manufactures new Drug
(3) Schedule V	(R) GMP practices for Ayurvedic, siddha & Unani medicines
(4) Schedule Y	(S) Particulars to be shown in the manufacturing records

(a) 1-R, 2-S, 3-Q, 4-P (b) 1-S, 2-Q, 3-P, 4-R
(c) 1-R, 2-S, 3-P, 4-Q (d) 1-S, 2-R, 3-P, 4-Q

90. Which of the following UV rays cause cancer
(a) UVA (b) UVB (c) UVC (d) All of the above

91. Which are the types of antibodies involved in hypersensitivity reactions
(a) LgG and LgD (b) LgG and LgM (c) LgD and LgA (d) LgM and LgD

92. The term used to describe unequal distribution of colour on a tablet is
(a) Chipping (b) Mottling (c) Lamination (d) Double impress

93. Why acetyl chloride undergoes nucleophilic substitution at a faster rate than methyl acetate
(a) The ester is more sterically hindered than the acid chloride
(b) The chloride ion is a better leaving group than methoxide
(c) The acid chloride is more sterically hindered than the ester
(d) The methoxide ion is a better leaving group than chloride

94. The key concept of Total Quality Managements (TQM) is
(a) Total control of all quality related activities
(b) Commitment of all employees to quality improvement and having team meetings
(c) Top management's direct involvement
(d) The Introduction ot the ISO 9000 Series

95. A drug of low water solubility when given orally is absorbed up to 90% of the administered does. The drug belongs to which class according to BCS classification
(a) Class IV (b) Class III (c) Class II (d) Class I

96. Which of the following is NOTa component of evaporator
(a) Heat exchange (b) Vacuum separator (c) Condenser (d) Cyclone separator

97. In parkinson's disease, there is a predominant loss of dopaminergic neurons
(a) Substantia (b) Cerebellar (c) Cerebral cortext (d) Locus ceruleus

98. At equilibrium the receptor occupancy is related to drug concentration by
(a) Henderson-Hasselbach equation (b) Hill- Langmuir equation
(c) Lineweaver-Burk equation (d) Langmuir adsorption isotherm

99. Which method is not suitable to calculate area under the curve

(a) Least square method
(b) Weighing andplatometery
(c) Trapezoid rule
(d) Integration of curve

100. OROS is a technology developed for/as

(a) Oral release rapid onset system
(b) Orally rapid disintegrating tablets
(c) Osmotic controlled oral drug delivery system
(d) Transdermal drug delivery system

101. Match the events in tablet manufacturing process with the effects found in tables

(1) Rapid drying of coated tablets after coaching
(2) Use to highly viscous solution
(3) Improper feed rate form hopper
(4) Excessive compression force

(P) Increased distegration time
(Q) Weight variation
(R) Orange peel
(S) Blistering

(a) 1-R, 2-S, 3-Q, 4-P
(b) 1-R, 2-S, 3-P, 4-Q
(c) 1-S, 2-R, 3-Q, 4-P
(d) 1-R, 2-P, 3-S, 4-Q

102. At pH 5, the ratio of the protonated to unprotanated forms of morphine pKa 7 would be

(a) 1:100
(b) 1:10
(c) 10:1
(d) 100:1

103. What structure is formed if the acyl side chain of penicillin is hydrolysed

(a) Penicellienic acids
(b) Penillic acids
(c) 7-Aminopenicillanic acid
(d) 6-Aminopenicillanic acid

104. The clinical trial is being conducted with 1500 volunteers which may spans on period of 2 years as per protocol. The clinical trial is in which phase

(a) Phase 1
(b) Phase 2
(c) Phase 3
(d) Phase 4

105. Which of the following drug has not undergone a clinical trial for its use to decrease intracranial pressure

(a) Dideoxyinosine
(b) Zidovudine
(c) Acetazolamide
(d) Nicotine

106. Colloidal depression have which type of rheology

(a) Newtonian
(b) Pesudoplastic
(c) Non- Newtonian
(d) Dilatant

107. Which of the reactive oxygen species is most dangerous to cells

(a) Singlet oxygen
(b) Hydroxyl radical
(c) Superoxide
(d) Peroxide

108. The Gibb's Phase rule

(a) Holds only for systems with more than components
(b) Predicts that a maximum of three phase can exits in one components system
(c) Does not count phase compositions as intensive variables
(d) Does not count pressure and temperature as intensive variables

109. Nerve impulse from the cochlea arrive first in which region of the brain

(a) Auditory cortex
(b) Thalamus
(c) Medulla oblongata
(d) Inferior colliculus

110. The product of a Michael reaction of a ketone enolate to ana, b-unsaturated ketone is ..... And addition reaction occurs in a/an
(a) 1,5- deketone; 1,4-fashion
(b) α-substituted acetate; 1,2 fashion
(c) β - hydorxy keto; 1,3 – fashion
(d) α, β - keto ester; 1,5 –fashion

111. Which of the following is a drug considered as potassium sparing diuretic
(a) Trimatrine (b) Chlorthiazide (c) Mannitol (d) Furosemide

112. Which of the reagent from the given can be used to protect ketone group
(a) Acidic methanol (b) Basic methanol (c) Methanol + KCN (d) Phenobarbitone

113. Which of the following drugs causes less inhibition or REM sleep
(a) Zolpidem (b) Ethanol (c) Lorazepam (d) Phenobarbitone

114. The starting materials for synthesis of sulfamethoxazole are
(a) 4- Aminobenzene-1-sulfonyl amide + 3-chloro-5-methyl isoxazole
(b) 4- Aminobenzene-1-sulfonyl amide + 3-amino-5-methyl isoxazole
(c) 4- Aminobenzene-1-sulfonyl amide + 3-amino-5-methyl isoxazole
(d) 4- Aminobenzene-1-sulfonyl amide + 5-chloro-5-methyl isoxazole

115. Match the following plant product with their chemical class
(1) b-amyrin
(2) Sqaulene
(3) Morphine
(4) Ephedrine
(P) Alkaloid secondary alcohol
(Q) Alkaloid, phenol
(R) Triterpene, secondary alcohol
(S) Asyclic triterpene, polyene
(a) 1-R, 2-S, 3-Q, 4-P
(b) 1-S, 2-Q, 3-P, 4-R
(c) 1-P, 2-S, 3-Q, 4-R
(d) 1-R, 2-S, 3-P, 4-Q

116. All of the following except one are subject to therapeutic drug monitoring, Which one
(a) Phenytoin
(b) Lithium
(c) Gentamicin
(d) Losartan

117. Thiamine deficiency causes decreased energy production because
(a) It is required for the process of transamination
(b) It is a co-factor in oxidative reduction
(c) It is a co-enzyme for transketolase is pentose phosphate pathway
(d) It is a co-enzyme for pyruvate dehydrogenase & alpha ketoglutarate dehydrogenase

118. Which of the following drugs are often found in both prescription and over-the-counter nasal decongestands
(a) Alpha 2 agonists
(b) Alpha 1 agonists
(c) Alpha 1 antagonists
(d) Beta 2 agonists

119. What is the surface tension of water of at 25°C
(a) 58 dyne/cm
(b) 68 dyne/cm
(c) 72 dyne/cm
(d) 82 dyne/cm

120. Acridine and xanthene rings are related to each other in that.....

(a) Xanthene is oxygen isoster of acridine
(b) Acridine is oxygen isoster of xanthene
(c) Xanthene is nitrogen isoster of aciridine
(d) Xanthene is sulfur isoster os acridine

121. Colligative properties depend on.....

(a) Structural arrangement of atoms within the molecules of solute and solvent
(b) The number of solute particles is solution
(c) The physical properties of the solute particles dissolved is solution
(d) Sum of the corresponding properties of individual atoms or functional group within the molecules

122. In polarography.....current must be blocked

(a) Residual (b) Migration (c) Diffusion (d) None

123. The propellant commonly used in topical aerosols is

(a) Trichloromonfluoromethane
(b) Trifluromonfluroethane
(c) Dichlordifluromthane
(d) Isopropyl alcohol

124. Which of the following increase systolic and diastolic pressure in normal patient

(a) Epineherine
(b) Norepinephrine
(c) Tyramine
(d) Phenylephrine

125. A large Reynold number is indication of which type of flow

(a) Smooth and stream line flow
(b) Laminar flow
(c) Steady flow
(d) Highly turbulent flow

ANSWER KEY GPAT 2016

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