GPAT QUESTIONS

1. _____, system does not have orifice to release the drug.
   (a) Elementary Osmotic Pump (b) L-OROS
   (c) Sandwich Osmotic Pump Tablet (d) Controlled Porosity Osmotic Pump Tablet
2. In which rearrangement reaction, Isocyanate is formed?
   (a) Curtious (b) Lossen (c) Both A & B (d) None
3. Chitin gets converted in to Chitosan upon:
   (a) Acetylation (b) Deacetylation (c) Oxidation (d) Reduction
4. All of the following are leaf constants EXCEPT
   (a) Vein-islet number (b) Vein- termination number
   (c) Stomatal number (d) Leaf fiber
5. Zink chloride is added to mouth wash because it acts as
   (a) Fragrance (b) Astringent (c) Cooling agent (d) Antibacterial
6. The choice of route of administration plays an important role in action of directly acting cholinomimetic . Adverse effect of choline esters that may be avoided by selection of an appropriate route of administration is
   (a) Bradycardia (b) Hypotension (c) Delirium (d) Sweating
7. Sieve size 80 has opening of
   (a) 0.100 mm (b) 0.125 mm (c) 0.150 mm (d) 0.180 mm
8. The ideal saponification value for suppository base is
   (a) 50-100 (b) 100-150 (c) 150-200 (c) 200-500
9. o, m, p- isomers can be differentiated on the basis of:
   (a) Chemical shift (b) Coupling constant
   (c) Extinction coefficient (d) Dipole moment
10. Which of the following drug comes under Schedule C_1
    (a) Opium (b) Ergot (c) Fish liver oil (d) Insulin
11. Source of amla is
    (a) Phyllanthus inruri (b) Terminiliachebula
    (c) Terminalia Bacteria (d) Embilca officinalis

12. What is the unit of dielectric constant

(a) Dyne (b) Debey (c) Farad/meter (d) No Unit

13. Monitoring of plasma drug concentration is required while using:

(a) Antihypertensive drugs (b) Levodopa

(c) Lithium carbonate (d) MAO inhibitors

14. Of the following antibiotics, which one would be acceptable to use when treating penicillin resistant S. pnumoinae otitis media

(a) Azithromycin (b) Clarithromycin (c) Cefuroxime (d) Cefaclor

15. Addtion of which of the following to a large volume parntral product is not advised

(a) Active pharmaceutical ingredient (b) Preservatives

(c) Buffering agens (d) Tonicity adjusters

16. A drug suspension decomposes by zero-order kinetics with a rate constant of 2 mg mL^{-1} $month^{-1}$ if the initial concentration is 100 mg mL^{-1} what is the shelf life

(a) 2 months (b) 3 months (c) 4 months (d) 5 months

17. Sanguinarine belongs to the subgroup of:

(a) Morphinans (b) Benzyl isoquinolines

(c) Phthalide isoquinolines (d) Benzophenanthrenes

18. Antidote for paracetamol overdosing is

(a) Atropine (b) N- Acetly cysteine (c) Glutathione (d) Theophylline

19. Which one of the following drug combination is contraindicated

(a) Glyceryl trinitrate and sildenafil (b) Amoxicillin and clavulanic acid

(c) Losartan and hydrochlorothiazide (d) Pyrimthemaine and sulfadoxine

20. Which sugar is suitable for diabetic patient

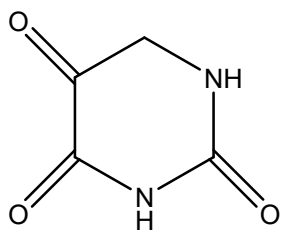
(a) Fructose (b) Lactose (c) Mannitol (d) Sucralose

21. Headquarter of Bureau of Indian standards is situated at

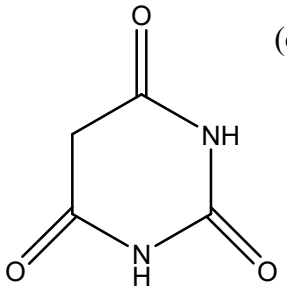
(a) New delhi (b) Mumbai (c) Kolkata (d) Chennai

22. Identity the structure of barbituric acid

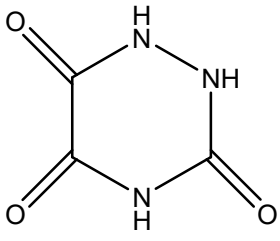
(a)



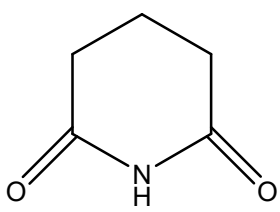
(b)



(c)



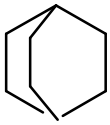
(d)



23. Ehtics for pharmacist are put forth by

(a) PCI (b) CDSCO (c) AICTE (d) WHO

24. What is the IUPAC name of the following compound



(a) Bicyclo[2.2.2] octane
(b) Tricyclo[2.2.2] ontane
(c) Bicyclo[2.2.0] ontane
(d) Bicyclo [2.2.1] heptanes

25. Morphine does not cause:

(a) Constriction of pupil
(b) CNS depression
(c) Respiratory depression
(d) Diarrhoea

26. Which of the following is seed gum

(P) Gaur gum
(Q) Locust bean gum
(R) Xanthan gum
(S) Gellan gum

(a) P and Q
(b) R and S
(c) Q and R
(d) P and S

27. The cancer that derived form ectoderm of endoderm of epithelial cells is

(a) Carcinoma (b) Sarcoma (c) Leukaemia (d) Myloid

28. Which of the following is/are marine anticancer

(a) Trabectadine
(b) Eribulin
(c) Cytarabine
(d) All of the above

29. Identity the compound which is derived form typtophan

(a) Pilocarpine (b) Ephedrine (c) Muscarine (d) Quinoline

30. Opium, cocoa, poppy straw are given in

(a) Schedule H
(b) Schedule X
(c) Narcotic drugs and Psychotropic substances act 1998
(d) Schedule C

31. Which of the following will be inert in NMR spectrometry

(a) 13C (b) 31P (c) 2H (d) 1H

32. What is the relationship between keto and enol tautomers

(a) Resonance forms
(b) Steriosomers
(c) Constituonal isomers
(d) Different conformations of the same compound

33. Which of the following is following is true for natural killer cells
(a) They may phagocytose tumor cells
(b) Killing of cells is enhanced by interleukin-2
(c) They recognize and kill some virus-infected cells
(d) Killing of cells is stimulated by prostaglandin E2

34. Evaluation of colour is tablets is done by
(a) Reflectance spectrophotometer
(b) Tristimulus colorimeter
(c) Microreflectance photometer
(d) All of the above

35. The disintegration time of the effervescent tablets is
(a) 2 minutes (b) 2.4 minutes (c) 3.5 minutes (d) 5 minutes

36. Identify the false statements about magmas:
(P) The addition of suspending agents to magmas is always necessary
(Q) Magmas differ from gels in that their suspended particles are larger
(R) Magmas are two- phase systems
(S) Magmas basically are gets
(a) P and Q (b) Q and R (c) Only P (d) Only S

37. All of the following ACE inhibitors are prodrugs EXCEPT
(a) Ramipril (b) Lisinopril (c) Enalapril (d) Perindopril

38. All of the following is resistant to both true and pseudo cholinesterase enzymes
(a) Carbachol
(b) Acetylcholine
(c) Methacholine
(d) Pilocarpine

39. Globule size of parenteral emulsion should be
(a) 0.1 to 0.5 µm (b) 0.5-5 µm (c) 5-10 µm (d) Any of the above

40. The objective of audit is to
(a) Improve the product quality
(b) Find out the fault
(c) Improve the product value
(d) Find and process fault and to improve

41. ..... is an alkaloid derived form aliphatic amino acid
(a) Reserpine (b) Nicotinic acid (c) Anabasine (d) Vinblastine

42. The drug sulphan blue is obtained from .....source
(a) Plant (b) Animal (c) Synthetic (d) Mineral

43. In mammals, The major fat in adipose tissue is:
(a) Triglyceride
(b) Cholesterol
(c) Sphingophospholipids
(d) Phospholipids

44. Dovers powder used as a diaphoretic contains:

(a) Ipecac & Opium
(b) Ipecac, Senna & Cinchona
(c) Opium, Ipecac & Cinchona
(d) All

45. Biological active form of Vit. D in man is:

(a) Cholecalciferol
(b) Calcifediol
(c) Calciferol
(d) Calcitriol

46. Actions and clinical uses of muscarinic cholinoceptor agonists include which on of the following

(a) Bronchodilation (asthama)
(b) Improved aqueous humor drainage (glaucoma)
(c) Decreased gastrointestinal motility (diarrhea)
(d) Decreased neuromuscular transmission and relaxation of skeletal muscle (During surgical anesthesia)

47. Regarding the role of surfactants in pharmaceutical suspensions for oral administration which of the following statements is false

(a) Surfactants decrease the water contact angle of dispersed drug particle
(b) Surfactants promote flocculation
(c) Surfactants with high HLB stabilize oral suspensions
(d) Surfactants increase the viscosity of the continuous phase of pharmaceutical suspensions

48. Which of the following drug is NOT used in treatment of H. Pylori infection

(a) Ampicillin
(b) Clarithromycin
(c) Mosapride
(d) Bismuth subgallate

49. The most suitable disinfectant for decontamination of HIV contaminated endoscope is

(a) 1% Sodium hypochlorite
(b) 2% Glutaraldehyde
(c) 5% phenol
(d) 70% ethanol

50. Which rule does provide the most accurate method to calculate the dose for child based on adult dose

(a) Age is months
(b) Age in years
(c) Weight in pounds
(d) Body surface area

51. Chemokine co-receptor 5 (CCR 5) inhibitor is

(a) Enfuvirtide
(b) Maraviroc
(c) Raltegravir
(d) Atazanavir

52. The Franz diffusion cell which is used for the evaluation of transdermal drug delivery systems consists of:

(a) 1 chamber (b) 2 chamber (c) 3 chamber (d) None

53. Whick of the following plastic is transparent and flexible

(a) Silicon rubber (b) PVP (c) HDPED (d) PE

54. In which method an order of a fixed number of items is placed every time an inventory level falls to a predetermined point

(a) A-B-C method
(b) Maximum and minimum method
(c) Open-to-buy method
(d) Economic order quantity

55. Choose the option with two reducing sugars

(a) Lactose and maltose
(b) Trehalose and surcrose
(c) Maltose and tredhalose
(d) Economic order quantity

56. The Local anesthetic with highest cardiotoxicity is

(a) Lingocaine
(b) Bupivacaine
(c) Levo- bupivacaine
(d) Procaine

57. Homatropine is

(a) Tropine ester of amino acetic acid
(b) Tropine ester of mendelic acid
(c) Tropine methyl bromide ester of mendelic acid
(d) Tropine ester of amino formic acid

58. Tranexamic acid is

(a) Antithrombotic (b) Antifibrinolytic (c) Fibrinolytic (d) Styptic

59. Which of the antihistaminic compound has antiadrogenic effect

(a) Famotidine
(b) Ranitidine
(c) Nizatidine
(d) Cimetidine

60. Which of the following drug is used prefenntially as preanesthetic mediation

(a) Midazolam
(b) Oxazepam
(c) Alprazolam
(d) Nitrozepam

61. Proton pump inhibitors are most effective when given

(a) Half hour before meals
(b) With meal
(c) After prolonged fasting
(d) Along with H2 blockers

62. Match compounds is Group I with inhibitory activities in Group II

Group I	Group II
(P) Vancomycin	(1) Folate metabolism
(Q) Rifampin	(2) DNA synthesis
(R) Puromycin	(3) Protein synthesis
(S) Ciprofloxacin	(4) RNA synthesis
	(5) Cell wall systhesis

(a) P-5, Q-4, R-3, S-2
(b) P-4, Q-3, R-1, S-2
(c) P-4, Q-1, R-3, S-2
(d) P-5, Q-3, R-2, S-4

63. Formation of Okazaki occurs in

(a) Transcription (b) Replication

(c) Translation (d) Reverse Transcription

64. Drug used in ventricular arrhythmia is

(a) Flecainide (b) Verapamil

(c) Esmolol (d) Diltazem

65. The lipoprotein with the fastest electrophoretic mobility and the lowest TG content is

(a) VLDL (b) HDL

(c) LDL (d) Chylomicrons

66. As per schedule 'Y' of the drugs and cosmetics act, the animal toxicity study requirements for marketing of a drug depends upon tentative route and duration of administration in humans. In This context , which one of the following statements is incorrect

(a) Single dose human use-animal toxicity for 2 weeks in 2 species

(b) Oral use for 2 weeks in humans- animal toxicity for 4 week in 2 species

(c) Aerosol use by repeated use in humans- animal toxicity for 24 weeks in 2 species

(d) Multiple daily ocular application for short duration-iregation test in 1 species for 3 weeks

67. For determining the efficacy of sterilization in an autoclave, the spores of the following organism are used as test organisms

(a) Bacillus cereus (b) Clostridium pefringens

(c) Bacillus stearothemophilus (d) Clostridium histolyticum

68. Which of the following pairs is mismatched

(a) Aerobic, helical bacteria- gram negative (b) Entrics- gram negative

(c) Myconbacteria – acid fase (d) Pseudomonas –gram positive

69. List of drugs whose import, manufacture and sale, labeling and packaging are governed by special provisions are included in schedule:

(a) X (b) K (c) H (d) G

70. Sigma minus method is used in assessment of

(a) Bioavailability (b) Absorption

(c) Metabolism (d) Tissue distribuation

71. Which of the plant family contains volatile oil in their trichome

(a) Rutaceae (b) Papaveracease

(c) Umbelliferare (d) Laminaceae

72. Ferritin is:

(a) Coenzyme
(b) The stored form of Iron
(c) Non-protein moiety
(d) Isoenzyme

73. Which oil is solute is alcohol

(a) Arachis oil
(b) Sesame oil
(c) Castor oil
(d) Corn oil

74. One of the first step of the citric acid cycle is isomerization of citric acid to isoctiric acid this step is necessary because

(a) Oxidation of secondary alcohols is very difficult
(b) Reduction of secondary alcohol is very impossible
(c) Reduction of tertiary alcohols would require a very powerful oxidizing agent
(d) Oxidation of tertiary alcohols would require oxidizing agents

75. Which of the following alkyl halides would undergo SN2 reaction most rapidly

(a) CH_3CH_2-BR
(b) CH_3CH_2-CL
(c) CH_3CH_2-I
(d) CH_3CH_2-F

76. Mechanism of action of Ketoconazole is:

(a) Inhibits Ergosterol synthesis
(b) Inhibits DNA gyrase
(c) Inhibits dihydropteroate synthetase
(d) Induces translation misreading

77. All are adrenal gland over activity disorders EXCEPT

(a) Addison's disease
(b) Conn's syndrome
(c) Cushing's syndrome
(d) Cushing's disease

78. The oil used in a parenteral product cannot contain.....

(a) WFI
(b) Parffin oil
(c) Peanut oil
(d) Glycerine

79. Identity the non-absorbable sature

(a) Catgut suture
(b) Chromic catgut suture
(c) Silk suture
(d) Polydioxanone suture

80. The relative lowering of vapour pressure is given by

(a) Raoult's law
(b) Henry's law
(c) Boyle's law
(d) Charles law

81. Identity the functional group present in meprobamate

(a) Amide
(b) Ester
(c) Carbamic
(d) Lactam

82. Match the following

(P) Gypsum salt
(1) $KAI(SO_4)_2 \cdot 12H_2O$
(Q) Epson salt
(2) $FeSO_4 \cdot 7H_2O$

(R) Alum
(S) Green vitriol
(3) $CaSO_4 \cdot 2H_2O$
(4) $MgSO_4 \cdot 7H_2O$

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

83. Tinea capitis is ringworm infection of

(a) Feet (b) Groin (c) Head (d) Nails

84. Rank the following compounds is order of increasing reactivity in electrophilic aromatic Substitution reactions

(P) C_6H_6 (Q) $C_6H_5CH_3$ (R) $C_6H_5NO_2$

(a) Q<P<R (b) R<P<Q (c) Q<R<P (d) P<Q<R

85. Dose dumping may be a general problem in the formulation of:

(a) Soft gelatin capsules
(b) Suppositories
(c) Modified release drug products
(d) None

86. Codeine differ in structure from morphine by:

(a) N-methyl group
(b) Acetyl group at C1 and C6
(c) –OC2H5 group
(d) –OCH3 group

87. Isotopes differ in:

(a) The number of protons
(b) The valency number
(c) The chemical activity
(d) The number of neutrons

88. Arrange the given acids in increasing order as per the number of carbons present in them

(P) Capric (Q) Caprylic (R) Caproic (D) Lauric

(a) P<Q<R<S
(b) R<Q<P<S
(c) R<Q<P<S
(d) Q<P<R<S

89. E1cb (Elimination reaction via conjugate base) which reaction intermediate will form?

(a) Carbocation
(b) Carbanion
(c) Free radical
(d) All

90. What are the three basic steps of conventional PCR

(a) Denature, anneal, & Strand displacement
(b) Denature, anneal & extension
(c) Strand displacement, synthesis & release
(d) Reverse-Transcription, anneal & extend

91. Rabies bodies are

(a) Negri bodies
(b) Cowdry type B inclusion bodies
(c) Cowdry type A inclusion bodies
(d) Bollinge bodies

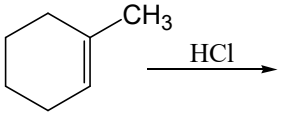
92. When glucose reacts with bromine water, the main product is

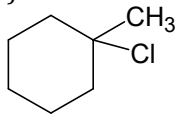
(a) Glucaric acid (b) Glucoronic acid (c) Sorbitols (d) Gluconic acid

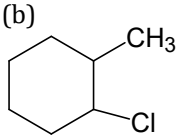
93. Increase in melting temperature of DNA is due to high content of

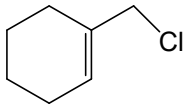
(a) A+T (b) G+C (c) A+G (d) T+G

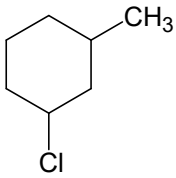
94. What will be the primary product of the following reaction



(a)


(b)


(c)


(d)


95. The mass spectrum of a compound with an approximate MW 137 shows tow equally intense. peaks at m/z 136 and 138. What does the suggest

(a) The compound is alkyl iodide (b) The compound is alkyl bromide
(c) The compound is alkyl chloride (d) The compound is aryl fluoride

96. Capping in tablets mainly due to:

(a) Less upper punch pressure (b) Poor flowability of granules
(c) Proper formulation design (d) Entrapment of air in tablet during compression

97. How can we detect the rhizome from the root of the Rauwolfia?

(a) By the presence of small central pith (b) By the absence of small central pith
(c) By the presence of vascular bundle (d) None

98. Drug of choice to treat H1N1 influenza is

(a) Adefovir (b) Cidofovir
(c) Oseltamivir (d) Tenofovir

99. Identify the correct statement

(P) Condensed tannins are polymers flavans
(Q) Condensed tannins do not contain sugar redidues
(R) Hydrolyzabletannis are polymers of gallic acid or ellagic acids
(S) Gallic acid and catechin are psedotannins

(a) Only Q (b) P and Q
(c) P, Q and R (d) P, Q, R and S

100. Quick breaking aerosols are applicable:

(a) Orally (b) Parenterally (c) Topically (d) Ophthalmically

101. In the Reimer-Tiemann reaction…… Reacts with phenol to give the ortho-formylated product

(a) Carbene
(b) Carbocation
(c) Carbanion
(d) Free redical

102. Which of the following in not added to chewing tablet

(a) Gildant
(b) Disintegrant
(c) Lubricant
(d) Anitadhesive

103. Range of C=O stretching in enol is

(a) 1800 cm^{-1}
(b) 1710 cm^{-1}
(c) 1685 cm^{-1}
(d) 1655 cm^{-1}

104. Match the following phytochemicals with their source and use

(P) Shatavrin — (1) Buckwheat and citrus fruits, strengthens capillary walls
(Q) Resvertatrol — (2) Broccoli and cabbage, protects against bladder cancer
(R) Glucosinolates — (3) Purple grape, anti inflammatory, anticancer
(S) Rutin — (4) Asparagus, galactogogue

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

105. Which RNA polymerase is the only whose product are capped

(a) RNA polymerase I
(b) RNA polymerase II
(c) RNA polymerase III
(d) RNA pimase

106. Match the scientist awarded with Nobel prize with their contributions

(P) Alexander Fleming — (1) GPCR
(Q) Kobilka — (2) β-blocker
(R) Banting — (3) Penicillin
(S) Black — (4) Insulin

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

107. Mean arterial pressure is

(a) Systolic pressure – Diastolic Pressure
(b) (Diastolic pressure + Diastolic Prssure)/2
(c) Diastotic alcohol + (1/3) × pulse pressure
(d) Stroke valume X heart rate

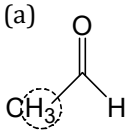
108. Eugenol is

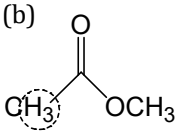
(a) Monoterpene alcohol
(b) Sesquiterpene alcohol
(c) Aliphatic alcohol
(d) Phenylpropene

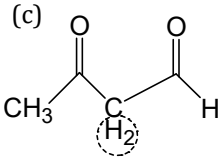
109. The Vitamin required for carboxylation of pyruvate to form oxaloacetate is

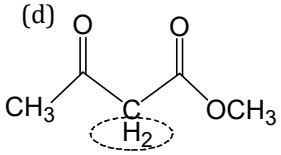
(a) Thiamine (b) Biotin (c) Pyridoxine (d) Niacin

110. Which of the following circled hydrogen is most acidic

(a) 

(b) 

(c) 

(d) 

111. The drug formulated as suspension follows ..... order reaction

(a) Zero (b) Pseudo Zero

(c) First (d) Pseudo first

112. Which diuretic causes decrease in release of insulin

(a) Chlorothiazide (b) Ethacynic zero

(c) Triamterene (d) Acetazolamide

113. Match the following drugs with their mode of action

(P) Methotrexate (1) Mitotic inhibitor

(Q) Cyclophosphamide (2) Antimetabolite

(R) Vincristine (3) Alkylating agent

(S) Dactinomycin (4) Intercalating agent

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

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

114. Which compound would be expected to show intense IR absorption at 3300 cm^{-1}

(a) $CH_3CH_2CH_2CH_3$ (b) $CH_3CH_2C{=}CH$

(c) $CH_3C{=}CCH_3$ (d) $CH_2CHCH_2CH_3$

115. In the carbon NMR, in what region of the spectrum does one typically observe carbons which are part of the aromatic ring

(a) -10-0 ppm (b) 40-60 ppm

(c) 80-100 ppm (d) 120-150 ppm

116. Meclofenamate belongs to which class of drug

(a) Slicylates (b) Oxicams

(c) Aryl antaranillic acid (d) p-Amino phenols

117. Match the following crude with their chemical constituents

(P) Aloe (1) Hesperidine

(Q) Ginger (2) Palmitin

(R) Lemon peel (3) Barbaloin

(S) Olive oil

(4) Allin

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

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

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

(d) P-3, Q-1, R-1, S-4

118. Dopamine agonists with tetralene function

(a) Ropinorole

(b) Pirebidil

(c) Pramipixole

(d) Rotigotine

119. The IUPAC name of the compound-$(CH_3)_2CHCH_2Cl$:

(a) 2-methyl-3-chloropropane

(b) 1-chloro-3-mehtyl butane

(c) 1-chloropentane

(d) 2-mehtyl-4-chlorobutane

120. A powerful inhibitor of stomatal opening is

(a) Auxin

(b) Bytokinin

(c) Gibberellin

(d) Abscisic acid

121. What is the renal clearance of a substance, if its concentration in plasma is 10mg, concentration in urine is 100 mg and urine flow is 2 ml/min

(a) 0.02 ml/min

(b) 0.2 ml/min

(c) 2ml/min

(d) 20 ml/min

122. Aim of pharmacovigilance is

(a) To monitor drug toxicity

(b) To monitor unauthorized drug manufacture

(c) To monitor rational use of drugs

(d) To check and control drug costs

123. Phase zero studies is a/an

(P) Exploratory investigational new drug study

(Q) Human microdosingstudies

(R) Step to speed up drug discovery/ development process

(S) Mandatory by FDA

(a) P and Q (b) Q and R (c) P, Q and R (d) P, Q, R and S

124. Parenteral product must be:

(a) Packed in bottle

(b) Sterilized

(c) Free from viable/living organism

(d) Pyrogenic

125. Quinine present in highest amount in:

(a) C. calisaya (b) C. officinalis (c) C. ledgeriana (d) C. succirubra

End of paper

FOR GUIDANCE

ASK YOUR MORE FRIENDS TO JOIN OUR WHATSAPP CHANNEL

ANSWER KEY GPAT 2014

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