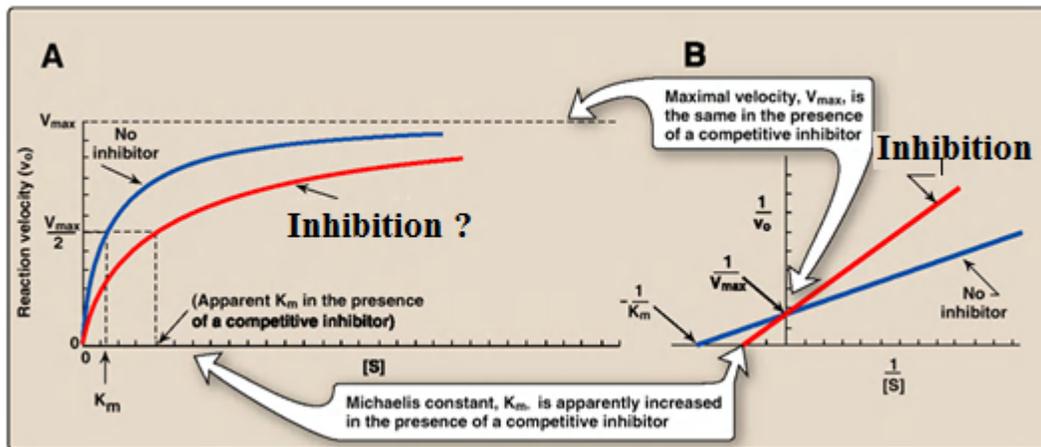Q-1. This type of inhibition (In Red line) will called……………



(A) Noncomptitative (B) Comptitative      (C) un Comptitative   (D)Mixed inhibition

Q-2. Which of the following ions may be effectively chelated by EDTA?

I. sodium     II. lithium       III. lead

(A) I only     (B) III only      (C) I and II only       (D) II and III only

Q-3. The term "impalpable" refers to a substance that is

(A) Bad tasting    (B) not perceptible to the touch   (C) greasy    (D) none

Q-4 Techniques used in the development of "biotechnological drugs" include

I. gene splicing

II. preparation of monoclonal antibodies

III. lyophilization

(A) I only    (B) III only   (C) I and II only    (D) II and III only

Q-5. Uses for surfactants in pharmaceutical products include

I. percutaneous absorption enhancers

II. cleansing agents

III. therapeutic activity

(A) I only    (B) III only    (C) I and II only    (D) I, II, and III

Q-6  High pressure and airless system to spray having pressure range

(A) 250-1000 Pisg          (B)400-2000 Pisg          (C)400-3000 Pisg        (D)250-3000 Pisg

Q-7  Poorly manufactured tablets may have small pinholes on the surface. This phenomenon is known as:

(A)  Picking                (B)   Mottling                (C)  Leaching                (D)   Cracking

Q-8  Creaming is a …………….. Process

(A) Irreversible            (B) reversible            (C) Difficult                (D) Both a &c

Q-9   Hydrolysis of ethyl acetate in acid base medium followed the order of reaction

 (A) I & II  Order        (B)  Pseudo first  & II  Order      (C) II & I  Order          (D) zero and first

Q-10 The rate of hydrolysis can be controlled by

 (A)  adding buffers      (B) complexation   (C) Removal of water   (D) decreasing the solubility

Q 11 Porosity of a porous powder is defined as

 (A)Bulk volume/void volume                 (B) void volume / Bulk volume

 (C) void volume / true volume                 (D) true volume  / Bulk volume

Q-12 The HLB range of emulsifier used in the preparation of water in oil emulsion is

 (A)4 to 6      (B) 7 to 12          (C) 13 to 15          (D) 16

Q-13 . Mannitol may be included in lyophilized products as a

(A) buffer      (B) bulking agent      (C) preservative        (D) sweetener

Q-14 Intrusion fluid found in Pychometer is

 (A)Acetone      (B) Mercury                (C) Isopropyl alcohol          (D) Ethyl alcohol

Q-15 when cumulative percent frequency on a probability scale is plotted scale against logarithm of the particle size, 50 % on the probability scale gives the powder particle diameter of

(A) arithmetic mean

(B) arithmetic  mode

(C) geometric mean

(D) harmonic mean

Q-16  The excise –officer of bonded laboratory may permit to take a sample from each batch to finished preparation free of duty up to a maximum amount of

(A) 250 ml        (B) 150 ml    (C) 100 ml       (D) 50 ml

Q-17  Every year the register of state pharmacy council is required to print the registers

(A) 1st January          (B) 1st may          (C) 1st april          (D) 1st march

Q18- Volatile oil can be distinguished from fixed oil as they give

(A) grease spot test negative

(B) give foam test positive

(C) they can easily freezed

(D) all

Q- 19 Yellow colour of gentian lutea rhizome is due to

(A) gentisin

(B) amarogentin

(C) gentiopicrin

(D) amarogentin

Q-20. Histamine H1 receptor blockers are useful in the treatment of aliment of the following EXCEPT:

(A) urticaria.    (B) seasonal rhinitis.    (C) drug reactions.    (D) bronchial asthma.

Q.21 one of the following drug is used as prophylactic treatment for migraine

(A) sumatriptan    (B) alnitidan    (C) propranolol    (D) ergotamine

Q.22  which of the following statement is not true

(A) Flunarizine is calcium channel blocker which is use as a prophylaxis treatment of migraine

(B) $PGI_2$ having platelet aggregatory property

(C) Azapirones are partial agonist of 5HT1A receptor

(D) PG's promote mucus & $HCO^{-3}$ secretion in GIT

Q-23  Which of the following is not corresct

(A) $pH = pKa + \log [HA]/ [A^-]$

(B) $pH = pKa - \log [A^-]/ [HA]$

(C) Both a &b

(D) None

Q-24 vitamin- D   function by which receptor

(A) GPCR    (B) enzyme linked   (C) intrinsic ion channel  (D) nuclear receptor

Q –25 ACE inhibitor produce which type of teratogenic reaction

(A) foetal goiter

(B) spina bifida

(C) virilization

(D) hypoplasia of organ

Q-26 . A drug that decreases the formation of uric acid is

(A) miglitol     (B) allopurinol          (C) probenecid          (D) propylthiouracil

Q-27 . Drugs employed in reducing elevated serum cholesterol include(s)

  i        gemfibrozil

  I.        cerivastatin

  III.       pioglitazone

 (A) I only              (B) III only     (C) I and II only        (D) I, II, and III

Q-28 . Which of the following beta-adrenergic blocking agents also exhibit alpha1-adrenergic blocking action?

  I. timolol

  II. sotalol

  III. labetalol

 (A) I only      (B) III only      (C) I and II only        (D) II and III only

Q-29 . Didanosine can best be described as a(an)

 (A) antiprotozoal                       (B) reverse transcriptase inhibitor

(C) protease inhibitor                   (D) beta-lactamase inhibitor

Q-30 The "first-dose" effect is characterized by marked hypotension and syncope on taking the first few doses of medication. This effect is seen with the use of

  1. doxazosin        II. enalapril            III. sotalol

 (A) I only       (B) III only            (C) I and II only        (D) I, II, and III only

Q-31 Dalteparin sodium acts in the body to

(A) regulate menstrual activity      (B) prevent blood clot formation

(C) inhibit thyroid function          (D) inhibit viral replication

Q-32 . Cromolyn sodium is a drug that is

(A) effective in acute asthmatic attacks    (B) a synthetic corticosteroid

(C) a histamine antagonist                  (D) a mast cell stabilizer

Q-33. Which of the following calcium channel blockers may be employed parenterally in the treatment of cardiac arrhythmias?

   I. verapamil      II. isradipine      III. amlodipine

(A) I only      ( B) III only        (C) I and II only        (D) II and III only

Q-35 . Which one of the following is NOT a progestin?

(A) norethynodrel      (B) norethindrone      (C) mestranol  (D) levonorgestrel

Q-36 . Potassium depletion is LEAST likely to occur in a patient using

(A) ethacrynic acid    (B) triamterene        (C) torsemide          (D) acetazolamide

Q-37. Which one of the following barbiturates is likely to be the shortest acting?

(A) amobarbital sodium                (B) methohexital sodium

(C) pentobarbital sodium              (D) mephobarbital

Q38. The primary function of simethicone in antacid products is to act as a (an)

(A) suspending agent        (B) adsorbent        (C) buffer      (D) antiflatulent

Q 39. The antiparkinson effect of levodopa may be inhibited by

(A) niacinamide  (B) d-alpha tocopherol  (C) pyridoxine HCl  (D) dihydrotachysterol

Q-40. The child's dose of a drug is reported as 1.2 mg/kg body weight. What is the appropriate dose for a child weighing 60 lb?

(A) 6 mg              (B) 9 mg              (C) 32 mg              (D) 72 mg

Q-41. Calcium chloride (CaCl2 • 2H20) has a formula weight of 147. What weight of the chemical is needed to obtain 40 mEq of calcium?
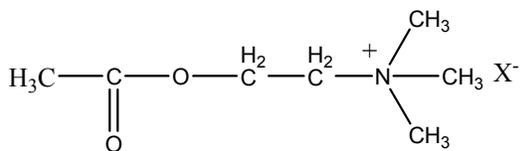
(Ca =40.1; Cl =35.5; H20 =18)

(A) 0.80 g       (B) 2.22 g       (C) 1.47 g       (D) 2.94 g

Q-42. The concentration of mercury in a water sample is reported as 5 ppm. Express this concentration as a percentage.
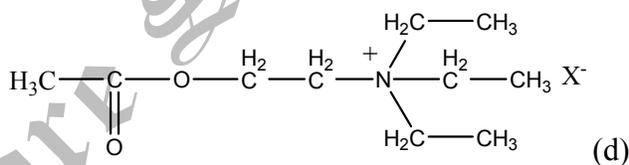(A) 0.00005%    (B) 0.0005%   (C) 0.005%   (D) 0.05%

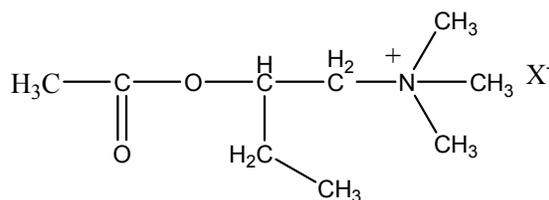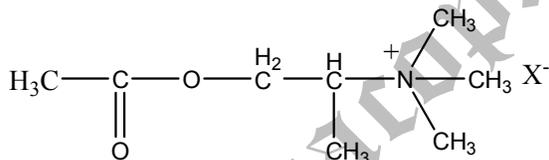Q-43 Structure will have highest muscarinic agonistic activity.

(A)                                                    (B)

$H_3C - C(=O) - O - CH_2 - CH_2 - N^+(CH_3)_2 - CH_3 \; X^-$

$H_3C - C(=O) - O - CH_2 - CH_2 - N^+(CH_2CH_3)(CH_2CH_3) - CH_2CH_3 \; X^-$   (d)

(c)

$H_3C - C(=O) - O - CH_2 - CH(CH_3) - N^+(CH_3)_2 - CH_3 \; X^-$

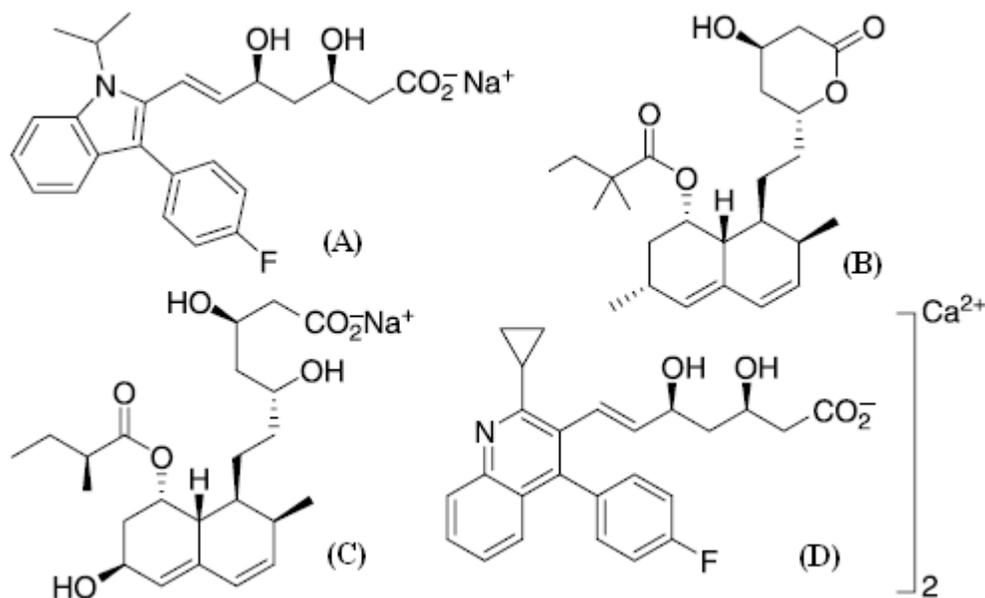$H_3C - C(=O) - O - CH(CH_2CH_3) - CH_2 - N^+(CH_3)_2 - CH_3 \; X^-$

Q-44 Which one is the correct structure of simvastatin (HMG CoA inhibitor)

Q-45 Stereochemistry of penicillins is

   (A) 2S, 5R, 6R

   (B) 2R, 5S, 6R

   (C) 2R, 5S, 6S

   (D) 2S, 5S, 6R

Q-46 - Which one of the following chemicals is NOT suitable as a drug excipient?

(A) methyl paraben     (B) starch        (C) glycerin            (D) benzocaine

Q 47-A patient with sever viral hepatitis, will have increased plasma level of which of the following :

(A) Ck2       (B) LDH$_1$       (C) hexokinase            (D) alanine transaminase

Q-48 Relation between δ value (1H NMR) for Axial (A) and Equatorial (E) Hydrogen of Rigid Six membered ring cyclohexane will be.

(A) $\delta_A = \delta_E$      (B) $\delta_A < \delta_E$      (C) $\delta_A > \delta_E$      (D) None of these

Q-49 As per Woodvard Fisher rule base value for this conjugated diene will be
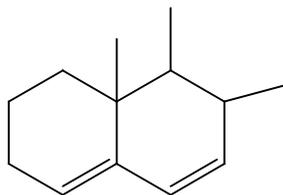


(A) 214      (B) 217      (C) 253      (D) 234

Q-50 In gas chromatography which detector is most sensitive to halogenated compounds like pesticides

(A) TCD     (B) FID      (C) ECD      (D) FP

Q-51 In oxidation- reduction titrations one mole of potassium dichromate is equivalent to Fe of

(A) 2 moles    (B) 4 moles    (C) 6 moles    (D) 1 mole

Q-52 The source of light in I.P. spectroscopy

  (A) Hydrogen lamp   (B) deuterium lamp   (C) silicon carbide rod   (D) both A & B

Q- 53 The value of stretching frequency of a bond can be calculated by

  (A) Hooke's law   (B) stroke's low   (C) lambert beer's law   (D) none

Q-54 a compound is gives red colour in solution from. Its $\lambda_{max}$ is in the region of

  (A) 400-450mµ   (B) 620-760mµ   (C) 520-570mµ   (D) 570-590mµ

Q-55 The stationary phase silica gel G is having the composition of …… for preparing the TLC

(A) silica gel + calcium sulphate      (B) silica gel + binder + fluorescent indicator

(C) silica gel + aluminum hydroxide      (D) cellulose with binder

Q-56  which of the following statement is not correct regarding alkaloids

   (A) they aregenerally basic in nature

   (B) Always havenitrogen in hetrocyclic ring

   (C) distributed mostly in higher plants

   (D) none.

Q-57 Phytolacca Americana a substituent for belladonna is identified by

   (A) preseance of idioblasts

   (B) anisocytic stomata

   (C) microshenoidal calcium oxalate crystals

   (D) cluster crystals

Q-58  Bixin is synthesized from

   (A) geraniol

   (B) geranyl pyrophosphate

   (C) geranyl geraniol

   (D) farnesol

Q-59  Which of the following is preferred method for estimation of sesquiterpinoidal compounds

   (A) HPLC          (B) HPTLC     (C) TLC          (D) GC-MS

Q. 60 which one of the following is hydrophobic amino acids

   (A) Valine      (B) leucine            (C) isoleucine.          (D) none

Q.61 What is the correct region behind sickle cell anemia defect in HbS?

 (A) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by valine in the HbS molecule.

(B) Normally the 9th amino acid in the beta chain is glutamic acid, this is replaced by valine in the HbS molecule.

(C) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by leucine in the HbS molecule.

(D) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by isoleucine in the HbS molecule.

Q-62 (-) Hyoscyamine is

   (A) 15-20 times more active as a mydriatic than (+) Hyoscyamine

   (B) inactive as a mydriatic

   (C) 3-5 times less active as a mydriatic than (+) Hyoscyamine

   (D) 100 times more active as a mydriatic than (+) Hyoscyamine

Q- 63 The number of peaks given by the $^1$HNMR spectrum of 2-methyl-1-pentene is

   (A) 5                (B) 4                (C) 3                D. 6

Q-64 In HPLC, the analytical performance improves when

   (A) Particle diameter is increased               (B) Particle diameter is decreased

   (C)   Coarser particles are paired with small column     (D) Low temperature is used

Q-65 M= $(m_2)^2/ m_1$ here $m_2$ is daughter ion & $m_1$ is parent ion or molecular ion then M is

   (A) Fragment ion   (B) Metastable ion      (C) Molecular Ion      (D) Rearrangement ion

Q-66 In per gram of powdered Lycopodium number of spores will be

   (A) 94,000          (B) 94,000,000          (C) 94,000      (D) 94,000,000

Q-67 Halphen's test is for the identification of

(A) Sesame oil          (B) Argemone oil      (C) Cotton seed oil     (D) Olive oil

Q-68 Microscopic characters of anticancer rhizome or roots of *Podophyllum peltatum*, Family *Berberidaceae* are

(A) In the rhizome eccentric pith is situated towards the upper surface & the vascular bundles are curved. The root exhibit a thick cork and central wood.

(B) Exhibit a varying number of concentric rings of fibrous vascular strands in which the phloem is towards the outer side and xylem is on the inner side.

(C) Cylindrical or sub cylindrical, flattened dorsiventrally. Shows a broken circle of vascular tissue with a distinct phloem.

(D) An erect, short, conical rhizome which may be longitudinally sliced, Shows a well-marked, dark cambium line.