

NIPER JEE 2011 Materials

Optical activity of the compound except

a) Plane of symmetry b) Axis of symmetry c) centre of symmetry d) None of these

which drug is used in vincent's angina?

Ans : Penicillin or erythromycin AND/OR metronidazole AND sodium bicarbonate solution gargles.

new list of richest person 2011

no.1 carlos slim helu \$53.5billion

telcome,mexico

2.biil gates \$53billion

microsoft,u.s

latest census2011 population of india-121019342

growth rate-17.64%(2001-11)

density-382prsqr km

linganupat-940

literacy rate-74.04%

Which surfactant is used in hair conditioner?

Ans : anionic

What is business?

a) Selling or buying of goods b) Production of goods c) Store of goods d) none of these

What is m/e ration for butyrophenone according to Mac Lafferty arrangement

a)132

b)157

c)242

d) 42

Which of the following gases will have the largest average molecular speed?

A) H₂ at 300 K

B) H₂ at 1000 K

C) O₂ at 300 K

D) O₂ at 1000 K

Which is not characteristic of Gentian roots

a) Stone cells are absent b) Starch grains are absent c) Phloem fibers are absent d) Calcium oxalate crystals are absent

Find the missing number 10, 67, 130, 223, ?

a) 352 b) 357 c) 348 d) 373

- ❖ HYPERTENSION: in our body blood -pressure is maintained by moment-to-moment regulation of cardiac output and peripheral vascular resistance, exerted at three anatomic sites arterioles, postcapillary venules (capacitance vessels), and heart. A fourth anatomic control site, the kidney, contributes to maintenance of blood pressure by regulating the volume of intravascular fluid. Baroreflexes, mediated by autonomic nerves, act in combination with humoral mechanisms, including the renin-angiotensin-aldosterone system, to coordinate function at these four control sites and to maintain normal blood pressure.
- Regulation of blood pressure in hypertensive patients differs from healthy patients only in that the baroreceptors and the renal blood volume-pressure control systems appear to be "set" at a higher level of blood pressure. so instead of recognising any BP around above 120/80 as increased blood pressure, body identifies a higher value as a the limit, hence the reflex mechanisms do not get activated immediately after a slight rise in BP

The term used to describe the setting of an aggregated system & refers to the descending of the boundary between the sediment & clear supernatant above it is

a) Ostwald ripening b) Subsidence c) Sedimentation d) none

- ❖ Another main difference between pharma markets of USA, EUROPE, JAPAN and INDIA is that..in USA, EUROPE AND JAPAN, only one brand name is allowed for a single molecule..and all the other products are marketed under generic names and there is specific process for generic product development, application and approval..so branded product can be substituted by generic products.

- ✓ the problem in INDIA is there is no AUTHENTIC BRANDED DRUG... for example..for a drug molecule..if 1,2,3 are branded products being marketed...if there comes a new product 4 ,and during approval if its shown to be bioequivalent with 1 to get released into market,it does not imply that it is bioequivalent with rest...but pharmacists working in pharmacies will not know exactly that with which product it is shown to be equivalent..despite that they substitute drug products which is actual scenario here..
- ✓ there is no concept of generic drug and generic name here in INDIA...one drug molecule has many drug products all of which are given branded names...which makes substitution incorrect as bioequivalence is not proved btwn all drug products.

Magnesia magma is an example of

- a) Plastic flow b) Pseudo plastic flow c) Dilatant flow d) Newtonian flow

Chemical nature of asbestos is

- a) Silica b) cellulose c) alumino silicate d) silico tungstate

Rimonabent drug is used to treat

- a.RA
b.obesity
c.multiple schlerosis
d.cancer

- ❖ Generic product developer starts working on developing generic product once the innovator product gets FDA approval and patent...during the patent period..the manufacturer tries to modify all possible variables,manufacturing process,packaging material,equipment etc..which would cut down the final cost of the generic product...the developer aims at 1% of the cost of the branded product as the final cost of the generic product,so when it is released into market he can make profits..
- ✓ THERE IS NO SINGLE MOLECULE WHICH IS INTRODUCED INTO THE MARKET BY OUR INDIAN PHARMA INDUSTRY...all our industries are primarily aiming at filing an ANDA or PARAGRAPH 4 filing,so as to introduce their products into US MARKET...make profits..
- ✓ there are very few industries which are into research activity..many reasons can be attributed,high cost involved in identifying the correct molecule and finishing all phases of clinical trials and filing INDA, lack of sufficient government funding and encouragement in carrying out research activities..n also the problem that after carrying half of the process if the drug molecule fails in phase 2 or phase 3 in proving its safety or else if any other industry files for INDA for same drug molecule before they finish their clinical trials that results in huge loss..so most of the industries go for filing ANDA rather than INDA

What is the difference between INDA and ANDA. .?

- INDA- investigational new drug application-here the innovator applies to the FDA to get approval and market his drug product..needs to supply all the details from preclinical animal testing to ongoing phase 4 studies,if at all approved innovator would get patent for his product..
- ANDA- abbreviated new drug application,this is applied by the generic drug product developer,no need of any animal testing,as the drug is already shown to be safe,he is concerned only with proving that his product is bioequivalent to the innovator's product i.e branded product,he can apply it one year before the patent of the branded product expires,so that by the time regulatory processes finish,patent will be expired and generic product developer can immediately launch his product.. or else he can go for PARAGRAPH 4 and prove that patent is invalid or by non-infringement can sell along with the innovator for 6 months which is called the 180 DAY EXCLUSISVITY!!!
- there are 3 types of IND-investigator IND (regular), emergency IND, and treatment IND..

NIPER Notes

Ripivirine developed by zibotec is 2nd generation non nucleoside reverse transcriptase inhibitor(NNRTI)approved by US-FDA in may

FDA on 27 may 2011 approved Boceprevir a hepatitis c virus(hcv) NS3/4A protease inhibitor indicated 4 chronic t/t

microsoft slogan "be what's next" Key people:Steve ballmer(ceo) Bill gates(chairman) Total assets US\$ 86.113 billion

Indian satellites(INSAT) 4 communication service & Indian remote sensing(IRS) 4 managment of natural resources..

half life of drug may b useful to determine.....

- a)dosage schedule of drug
- b)level of absorption
- c)disribution in body system
- d)time to get d steady state

Friedrich type V hyperlipidemia is due to excess of:

- a) HDL
- b) LDL
- c) IDL
- d) Chylomicrons

Which of the following compounds do not contain an sp^3 hybridized oxygen atom?

- A) ketones
- B) alcohols
- C) ethers
- D) esters
- E) water

Insert d missing num in following series:17,19,23,29,____?

- a)30,b)31,c)33,d)37

which drug act by free radical scavenger yk action for ischaemic brain damage???

- a. tirilazad
- b.lobeluzole
- c.riluzole
- d.selfotel

Major side effect of Auranofin, a gold compound is

- a) Diarrhea b) Flatulance c) Anemia d) Alopecia

which variety of papaverum having no morphin?

- a.p.bracteatum
- b.p.somniferum
- c.p.inermedia
- d.p.dubium

Bohrs effect is related to

- a) Lipids b) Plasma proteins c) Heamoglobin d) Vitamins

Plackett-Burman design is:

- A.Computer aided design

- B. Drug design tool
- C. Type of experimental design
- D. Type of HPLC column design

The drug rufinamide is approved for use in seizures. what is brand name?

- a) Banzel
- b) Latisse
- c) Gleevac
- d) Zenex

FOR NIPER-JEE

Dielectric constant:

Mineral oil: 0

Na Oleate: 1-5

CHCl₃: 5

CH₃OH: 30

Water: 80

ABC system is used 4:

- A. Drug control
- B. Inventory control
- C. Prize control
- D. None

Bloch & Purcell won nobel prize of 1952 for there contribution in:

- A. NMR
- B. IR
- C. DSC
- D. chromatography

listerine is pdct of which company?

- A J&J
- B Novartis
- C GSK
- D Pfizer

Biochemical target in pharmaceutical lead discovery may be

- a) Enzymes
- b) Receptor
- c) Ion channels
- d) All of these

Microdosing is directly given to patient without preclinical testing in which phase

- a) 0 Phase
- b) I Phase
- c) II Phase
- d) III Phase

In Michaelis-Menten equation V_{max} is measure of:

- A. Substrate affinity
- B. Coenzyme activity
- C. Catalytic efficiency
- D. Cofactor affinity

Which of the following route used for BCG vaccine

- a) Subcutaneous
- b) Intradermal
- c) Transdermal
- d) Oral

Indian Institute of Toxicological Research is located at

- a) Kanpur
- b) Jgatnagar
- c) Allahbad
- d) Lucknow

Hydrogen bonding interactions between two polymer can be studied by

- A. IR
- B. Mass
- C. XRD
- D. None

Ictres index is used to determine

- a) Serum bilirubin
- b) Urine albumin
- c) Serum albumin
- d) Urine bilirubin

Tryptophan is coded by

- a) F
- b) W
- c) Y
- d) N

Fluid mosaic model is used to explain

- a) cell membrane
- b) phospholipid
- c) receptor concept
- d) none of these

The amino acid alanine in our body has.....configuration.

- a) R
- b) S
- c) both a & b
- d) none of these

Find the missing number 10, 67, 130, 223, ?

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Chloroquine is drug of choice for

- a) resistant falciparum b) relapsing P.vivex c) resistant P. vivex d) none of these

Minister of Chemical & Fertilizer Govt of India was in 2004-2009 govt.

- a) A. K. Antony
b) Ramvilas Paswan
c) Sharad panwar
d) Lalu Yadav

Watson & Announced discovery of DNA structure in.....

- a) Sanger, 1960
b) Crick, 1953
c) Crick, 1960
d) Sanger, 1953

The genetically determined unwanted reactivity to chemicals/drugs is called:

- A. Intolerance
B. Drug allergy
C. Idiosyncrasy
D. Poisoning

Major side effect of Auranofin, a gold compound is

- a) Diarrhea b) Flatulence c) Anemia d) Alopecia

Indian P'copoeia published by:

- A) Ministry of Health & Family Welfare
B) Dept. of P'ceuticals
C) D.C.G.I
D) Ministry of Chemicals

Three dimensional structure of a protein & the relative stereochemical position of atom is determined by

- a) X-ray crystallography b) IR spectroscopy c) ESR d) All of these

Non crosslinking capsule is made up of

- A. Gelatin
B. Ethyl cellulose

C.HPMC

D.Pectin

Lipitor is brand name of atorvastatin; is best selling drug product by

a) Eli Lilly b) Pfizer c) Glaxo d) Sanofi

1.Wyeth has been overtaken by

2.Cook's pole apparatus used for

3.who was the founder chairman of CPCSEA

G-proteins are

a) Tetrameric b) Bimeric c) Trimeric d) Pentameric

Ram and Shyam have some books. If Ram gives 3 books to Shyam than both has equal number of books but Shyam gives 3 books to Ram then number of book will be double to Ram as compare to Shyam then How many numbers of book have Ram and Shyam?

a) 6, 8 b) 8, 6 c) 15, 21 d) 21, 15

All of the following are used as mutagens except

a) β -particles b) α -particles c) γ -particles d) IR rays

Which isomer of mevalonic acid is responsible for synthesis of isoprene

a) R b) S c) both a & b d) none of these

Phase IV clinical trials are related with:

A.Human toxicity

B.Adverse drug reaction

C.Efficacy

D.Post marketing survey

Material used in IUDs is

a)Copper

b)Cobalt

c)Aluminium

d)Titanium

(A) goes 4 km south dn 8 km west dn 6 km north dn 8 km east &dn 2 km south.How far is (A) from starting point?

A.2 km

B.1

C.0

D.3

which type of seizure is produced by the PTZ?

Ans :

electrically induced seizures cause tonic -clonic....check rang and dale

produces the clonic convulsions in mice and the drugs used in the treatment of this are of the category used for the treatment of the absence seizure

2D QSAR,3D QSAR, COMFA,COMSIA: for finding structure activity relationship

The sum of two numbers is 42 and their product is 437. then the absolute difference between the number is

- a)3
- b)4
- c)5
- d)7

HTS means

- a)High throughput screening
- b)Herbal Therapeutic survey
- c)Both a & b
- d)none of these

GRAS is related to

- a)Safety
- b)Stability
- c)reactivity
- d)none of these

which antitubercular drug causes blindness?

Ans: ethambutol soz optic nuritis so lesds to blindness

Which fatty is biosynthesized by human body(N-10)

- a)Stearic acid
- b)Oleic acid
- c)Linoleic acid

d) Linolenic acid

RBI nationalized in (N-09)

- a) 1951
- b) 1950
- c) 1949
- d) 1935

When HBr is added to styrene according to anti-Markovnikov's rule, what product? (N-2010)

- a) $C_6H_5CHBrCH_3$
- b) $C_6H_5CH_2CH_2Br$
- c) $C_6H_5CH_2CH_3$
- d) None of these

In which State AYUSH (AYURVEDIC, YOGA, UNANI, HOMOPATHY,) is established? (N-10)

- a) Himachal Pradesh
- b) Uttarakhand
- c) Kerala
- d) M.P

Bacteria are present everywhere except (NIPER JEE-2008)

- a) Soil
- b) Hot water spring
- c) Ice
- d) Distilled water

Which of the following alpha-glucosidase inhibitors is a polysaccharide?

- (a) miglitol (b) viglibiose (c) acarbose (d) glucogol.

Which receptor has a heptahelical structure?

- (a) metabotropic (b) tyrosine kinase (c) ionotropic (d) nuclear

Which of the following is an inverse agonist?

- (a) beta-carboline (b) cannabinoids (c) none of the above (d) all of the above

Which of the following cephalosporins has a disulfiram-like effect?

- (a) cefixime (b) cefaperazone (c) cefuroxime (d) cefamandole

imp for NIPER JEE

1. Carrs index USP values
2. IVIV correlation briefly
3. Intermolecular forces
4. seive sizes
5. sterilization conditions
6. Nobel prizes from Bio/Medical
7. human genome project
8. monoclonal antibodies

rabbit injection method of testing of pyrogens are accepted by only one country. what is the country name?

- a) america
- b) india
- c) china
- d) Canada

which of the following is an non-steroidal based nicotinic antagonist

- a) vecuronium
- b) pipecuronium
- c) vecronium
- d) tubacurarine

which is not involved in metabolism of cevimeline hydrochloride

- a) CYP2D6
- b) CYP2C4
- c) CYP3A3
- d) CYP3A4

the most frequently used surfactant in the case of shampoos is?

- a. anionic
- b. cationic
- c. non-ionic
- d. amphi