

DI PAPER RAJASTHAN 2012

Q.1 Mini Pill contains

- a) Estrogen
- b) Non Hormonal Contents
- c) Progesterone
- d) Estrogen and Progesterone

Q.2 Longer use of organic nitrates in Angina pectoris cause one of the following side effect

- a) Hepatotoxicity
- b) Tolerance
- c) Aplastic anemia
- d) Nephrotoxicity

Q.3 Zafirlucast is used as anti-asthmatic acts as

- a) Prostaglandin antagonist
- b) Lipooxygenase Inhibitor
- c) Cyclooxygenase inhibitor
- d) Leukotrine receptor antagonist

Q.4 Phloem does not contain

- a) Phloem fibers
- b) Sieve-tubes
- c) Companion cells
- d) Tracheids

Q.5 Group of plants of a species which have identical morphological characters but differ in their chemical nature known as

- a) Hybrids
- b) Chemodemes
- c) Polyploidy
- d) Mutation

Q.6 Which of the following is the major cause of drug instability?

- a) Oxidation
- b) Photolysis
- c) Hydrolysis
- d) Racemization

Q.7 What is the unit of rate constant for zero order kinetics?

- a) s^{-1}
- b) $Mol L^{-1}s^{-1}$
- c) $Mol L s^{-1}$
- d) $Mol^{-1}L^{-1}s$

Q.8 Talc is used as glidant as ?

- a) 5%
- b) 10%
- c) 15%
- d) 20%

Q.9 The surface material from a tablet that is sticking to and being removed from the tablet's surface by a punch is known as

- a) Capping
- b) Lamination
- c) Sticking
- d) Picking

Q.10 Zeatin

- a) Auxin
- b) Gibberlin
- c) Cytokinin
- d) Abscisic acid

Q.11 Cap Aloe is

- a) Aloe Barbadensis
- b) Aloe Perryi
- c) Aloe Vera
- d) Aloe ferox

Q.12 Most toxic constituent of Red Squill is

- a) Scillaren A
- b) Scillaren B
- c) Scilliroside
- d) Glucoscillaren

Q.13 Rutin is rhamnoglycoside of

- a) Scopoletin
- b) Hesperitin
- c) Esculetin
- d) Quercetin

- Q.14 Castor oil is
- Non drying oil
 - Semi drying oil
 - Drying oil
 - Super drying oil
- Q.15 Animal wool fat is
- Fat
 - Lipid
 - Wax
 - Fixed oil
- Q.16 Hyoscyamus is
- Belladonna
 - Henbane
 - Stramonium
 - Duboisia
- Q.17 Meuroxide test is used for identification of
- Purine
 - Tropane
 - Quinoline
 - Indole
- Q.18 Gas sterilization is done by using gas
- Ethylene oxide
 - Formaldehyde
 - Nitrous oxide
 - Acetaldehyde
- Q.19 Diazotization titration is not used for
- Pyrimethamine
 - Sulphadiazine
 - Sulfamethoxazole
 - Thiamine HCl
- Q.20 In gas chromatography column length is
- 5-10 meter
 - 1-4 meter
 - 10-15 meter
 - 15-20 meter
- Q.21 What is the unit of specific conductance?
- Ohm
 - Mho
 - Ohm cm^{-1}
 - mho cm^{-1}
- Q.22 Which of the following material is not used in the stationary phase of size exclusion chromatography?
- Dextran
 - Agarose
 - Polyacrylamide
 - Polyvinyl Alcohol
- Q.23 Which of the following Indicator is not used in non aqueous titration?
- 1-Naphthol benzein
 - Diphenylamine
 - Quinaldine Red
 - Malachite green
- Q.24 Ecuelle method is used for extraction of
- Lemon oil
 - Clove oil
 - Camphor oil
 - Palmrosa oil
- Q.25 Peri-winkle is synonym of
- Peru Balsam
 - Ipecac
 - Vinica
 - Guggel
- Q.26 Methylation of cephaelin is converted into
- Emetine
 - Hydrastine
 - Psychotrine
 - Ipecacuanin
- Q.27 Crocin is obtained from Crocus used as
- Coloring agent
 - Antipyretic
 - Antirheumatic
 - Antidiarrhial
- Q.28 Bromelain is mixture of proteolytic enzyme obtained from
- Papaya
 - Pine apple
 - Peptone
 - Bacillus subtilis

Q.29 Opium is found as a salt of

- a) Meconic acid
- b) Hydrochloric acid
- c) Quinic acid
- d) Sulphuric acid

Q.30 Methyl orange has pH range of

- a) 8.3-10
- b) 1.2-2.9
- c) 2.8-4.9
- d) 6.8-8.4

Q.31 Male fern is collected during

- a) Autumn
- b) Late autumn
- c) Summer
- d) After Summer

Q.32 When 0.1 M HCl is titrated with 0.1 M sodium hydroxide using indicator, which type of error occurs?

- a) Hydrogen error
- b) Hydroxyl error
- c) Acidic error
- d) Alkaline error

Q.33 In Glass electrode, platinum wire is inserted in which of the following solution

- a) 0.1 M Hydrochloric acid
- b) 0.1 M Mercuric chloride
- c) 0.1 M Potassium chloride
- d) 0.1 M Potassium Bromide

Q.34 Absorption maxima goes to longer wavelength is called

- a) Hypochromic shift
- b) Hyperchromic shift
- c) Blue shift
- d) Red shift

Q.35 Xenon arc lamp is source of

- a) Spectrofluorometer
- b) IR Spectrometer
- c) UV-Visible Spectrophotometer
- d) MNR

Q.36 What is unit of chemical shift?

- a) Centimeter
- b) cm^{-1}
- c) Part per million
- d) Cycle per second

Q.37 In Polarography, diffusion current is effected by

- a) Nernst equation
- b) Ilkovic equation
- c) Handerson equation
- d) Gram equation

Q.38 Parathyroid gland regulates absorption of calcium. Which of the following is used in hypoparathyroidism

- a) Estrogen
- b) Liothyroxine
- c) Prednisolone
- d) Dihydrotestosterone

Q.39 Which of the following drug is used in acute attacks of gout?

- a) Colchicine
- b) Probenecid
- c) Sulfapyridine
- d) Allopurinol

Q.40 Auranofin is used in

- a) Rheumatoid Arthritis
- b) Gout
- c) Hyperglycemia
- d) Epilepsy

Q.41 Which of the following drug is similar to Acarbose in classification

- a) Tolbutamide
- b) Glipizide
- c) Miglitol
- d) Pioglitazone

Q.42 Propyl thiouracil is similar to one of the following drug in pharmacological action?

- a) Azothioprine
- b) Chlormbucil
- c) Methimazole

- d) Acyclovir
- Q.43 Which of the following is pure opioid antagonist?
- a) Butorphanol
 - b) Nelbupine
 - c) Buprenorphine
 - d) Naloxone
- Q.44 Which of following drug causes maximum dependence?
- a) Diethylmorphine
 - b) Diacetylmorphine
 - c) Dimethylmorphine
 - d) Diphenoxylate
- Q.45 Latanoprost has one of the following mechanism of action in glaucoma
- a) Miosis
 - b) Prostaglandin analogues
 - c) Carbonic anhydrase inhibitor
 - d) Decrease formation of aqueous humour.
- Q.46 Lawson is obtained from
- a) Gymnema
 - b) Liquorice
 - c) Dioscorea
 - d) Henna
- Q.47 Which one of the following is used as Osmotic purgative?
- a) Milk of magnesia
 - b) Senna
 - c) Extract of rubarb
 - d) Aluminium hydroxide gel
- Q.48 4 in 10, 000 is calculated as
- a) 4 %
 - b) 0.04 %
 - c) 0.4 %
 - d) 40%
- Q.49 Sodium picrate is used for identification of
- a) Cyanogenic glycoside
 - b) Isocyanate glycoside
 - c) Flavanol
- d) Anthracene
- Q.50 What portion of oxygen is present in 12% hydrogen peroxide?
- a) 20
 - b) 40
 - c) 60
 - d) 100
- Q.51 Vapour pressure of propellant for aerosols are calculated from
- a) Boyal's law
 - b) Fick's law
 - c) Stoke's law
 - d) Dalton's law
- Q.52 Sedimentation rate of suspension is studied by
- a) Boyal's law
 - b) Fick's law
 - c) Stoke's law
 - d) Dalton's law
- Q.53 Multi point viscometer that is used to determine viscosity
- a) Ostwald Viscometer
 - b) Capillary Viscometer
 - c) Falling ball Viscometer
 - d) Cup and Bob Viscometer
- Q.54 To study the stress and rate of shear, the phenomenon of converting gel to sol is known as
- a) Plastic flow
 - b) Pseudo plastic flow
 - c) Thixotropy
 - d) Dilatant flow
- Q.55 What is pore size in membrane filter?
- a) 0.5 μm
 - b) 0.22 μm
 - c) 0.45 μm
 - d) 0.1 μm
- Q.56 Exotoxins are
- a) are pyrogens
 - b) are water soluble and can pass through proteinous layer
 - c) are lipopolysachharide, protein

- d) are much less toxic to endotoxin
- Q.57 Cetrimide is
- Cationic surfactant
 - Anionic surfactant
 - Nonionic surfactant
 - Amphiphilic surfactant
- Q.58 Smallest size of capsule most widely used is
- 0
 - 5
 - 1
 - 000
- Q.59 Homologous series in hydrocarbons are determined by
- R_f Value
 - R_x Value
 - R_m Value
 - R_t Value
- Q.60 Sodium methoxide is standardized by
- Oxalic acid
 - Perchloric acid
 - Acetic acid
 - Benzoic acid
- Q.61 Which of the following is used reference in Electron Spin Resonance?
- Tetra methyl silane
 - Dimethyl formamide
 - Di hydro phenylzircon (DPPH)
 - Trimethyl silane
- Q.62 What is full form of ICH
- International Council of Hormone
 - Indian Conference of Harmonization
 - International conference of Harmonization
 - International conference of humanity
- Q.63 Which of the following is not related to ICH guideline?
- Quality
 - Cost
 - Efficacy
 - Potency
- Q.64 Pertusis potency is standardized by
- 3+3 assay
 - Factorial assay
 - Potency is determined by ELISA Test
 - Potency is determined in fowl
- Q.65 For Cancer cell line culture a HAT nutrient media is required. What is HAT?
- Hypoxanthine, Amthopterin, Thymidine
 - Hydroxyuracil, Aminoacid, Thymidine
 - Hypoxanthine, Aminopterin, Thymine
 - Hypoxanthine, Amthopterin, Thymine
- Q.66 Which of the following does not contain mitochondria?
- Flatten fungi
 - Bacteria
 - Protozoa
 - Yeast
- Q.67 Which one of the following is mechanism of Ranitidine?
- Prostaglandin release
 - Stimulate gastrin release
 - Stimulate histamine release
 - Inhibit gastric acid secretion
- Q.68 Which of the following is side effect of Cimetidine?
- Diarrhea
 - Constipation
 - Inhibition of hepatic enzyme
 - none of these
- Q.69 Which of the following ion is involved spore formation ?
- Fe²⁺
 - Fe³⁺
 - Zn²⁺
 - Ca²⁺
- Q.70 Southern blot is used for sequencing of nucleotide in probe for
- Hybridization of DNA molecule
 - Hybridization of Protein molecule

- c) Hybridization of RNA molecule
d) Hybridization of Glycoside molecule
- Q.71 Fluted bottles are used to pack
a) Syrup
b) Ointment
c) Linctus
d) Mouth washes
- Q.72 Which of the following is used in scintillation detector ?
a) Sodium bromide
b) Naphthlene
c) Anthracene
d) Lead sulphate
- Q.73 Which of the following is incorrect about Innate Immunity?
a) Non specific
b) Invade Foreign microorganism
c) provide immunity which is not affected by infection
d) Give active immunity
- Q.74 Black fluid is
a) Homogenous coaltar acid solution
b) Suspension of activated charcoal
c) Cresol with soap solution
d) None of these
- Q.75 Restriction endonuclease is used in recombinant DNA technology inreaction
a) Type I
b) Type II
c) Type III
d) Type III
- Q.76 What is the weight of rectal suppository?
a) 3-5 g
b) 4 g
c) 2 g
d) 6 g
- Q.77 Fusogen used in hybridoma of monoclonal Antibodies
a) Polyethylene glycol
b) Tween 40
- c) SDS
d) Tween 80
- Q.78 Prophase generation in DNA ligase
a) ϕ T4 bacteriophage
b) Virus
c) Bacteria
d) Fungi
- Q.79 Engulfment of memberanous organ is done with
a) Lysosome
b) Endoplasmic reticulum
c) Mesosome
d) Golgi apparatus
- Q.80 Which of the following release cytolytic T4 proliering cells that is used in cancer
a) IL1
b) IL6
c) IL8
d) IL2
- Q.81 Which is not serological species of Vibrio cholera
a) Inaba
b) Ogava
c) Hejikoma
d) Saukton
- Q.82 10-11 epoxide is metabolic product of
a) Phenytoin
b) Carbamezapine
c) Valproic acid
d) Ethusuximide
- Q.83 Dissociation constant of acid is written as
a) K_a
b) pK_a
c) pH
d) K_b
- Q.84 Noyes witteny equation is used for study of
a) Dissolution rate
b) Disintegration rate
c) Dissociation rate
d) Difusion rate

Q.85 Enzyme Trypsin is used as

- a) D
- b) E
- c) Nourshing the cell
- d) Deattachment of cell

Q.86 Which of the following organism is used in heterogenous fermentation of lactic acid?

- a) Leuconostoc mesentride
- b) Lactobacillus Bulgaricus
- c) Bacillus oriza
- d) Bacillus cereus

Q.87 Human Immuno Virus (HIV) is

- a) Enveloped DNA
- b) Non enveloped DNA
- c) Enveloped RNA
- d) non enveloped RNA

Q.88 Maximum absorption of drug in gastrointestinal tract is achieved by

- a) Facillated diffusion
- b) Active diffusion
- c) Active transport
- d) Passive diffusion

Q.89 Which of the following drug is MAO-B inhibitor?

- a) Selegiline
- b) Dopamine
- c) Adrenaline
- d) Isoprenaline

Q.90 Which of the following drug is similar to Carbidopa in pharmacological category?

- a) Levodopa
- b) Bromocriptine
- c) Amantadine
- d) Beneserazide

Q.91 What is primary site of action for spironolactone and triameterine?

- a) Proximal tubule
- b) Acending tube of henle
- c) Descending tube of henle
- d) distal collecting tubule

Q.92 Partial hydrolysis of starch with dilute acid will produce

- a) Chitin
- b) Dextrin
- c) Sumerin
- d) glucose

Q.93 most of the drugs will bind with which of the following plasma protein?

- a) Albumin
- b) Globulin
- c) histone
- d) Glycoprotein

Q.94 Plain vaccine is

- a) Vaccine with single species
- b) vaccine without adjuvant
- c) Vaccine with adjuvant
- d) Synonym of monovalent vaccine

Q.95 Competition in replication is effected by

- a) Calcium and heat
- b) Zinc and heat
- c) Calcium without heat
- d) Zinc without heat

Q.96 Effective dose of radiation in tissue is measured with

- a) Rontgen
- b) REM
- c) RBE
- d) Radiation per unit

Q.97 Pemidronate is used in

- a) Pegat's disease
- b) Menneir's disease
- c) Hodkin's disease
- d) Cushing's disease

Q.98 Dissolution control absorption of drug through membrane is

- a) Less than 0.1 mg
- b) 0.1 mg
- c) 1 mg
- d) 2 mg

Q.99 In Prophase, the phage vectors are used to transduction of recombinant of phage genome

- a) Virus
 - b) Enzyme
 - c) Bacteria
 - d) Vectors are bacteriophage T7 and lamda
- (λ)

ANSWER KEY [DCO (RAJASTHAN) 2012]

01 c 21 d 41 c 61 c 81 d
02 b 22 d 42 c 62 c 82 b
03 d 23 b 43 d 63 b 83 a
04 d 24 a 44 b 64 c 84 a
05 b 25 c 45 b 65 a 85 d
06 a 26 a 46 d 66 b 86 b
07 b 27 c 47 a 67 d 87 c
08 a 28 b 48 b 68 c 88 d
09 d 29 a 49 a 69 d 89 a
10 c 30 c 50 b 70 a 90 d
11 d 31 b 51 d 71 d 91 d
12 c 32 d 52 c 72 d 92 b
13 d 33 a 53 d 73 c 93 a
14 b 34 d 54 b 74 a 94 b
15 c 35 a 55 b 75 b 95 a
16 b 36 c 56 b 76 c 96 c
17 a 37 b 57 a 77 a 97 a
18 a 38 d 58 b 78 a 98 a
19 d 39 a 59 a 79 c 99 d
20 b 40 a 60 d 80 d 100