

MADHYA PRADESH DRUG INSPECTOR

2012

- Which of the following is a Class IA antiarrhythmic drug:
 - Sotalol
 - Disopyramide
 - Verapamil
 - Propranolol
- Which of the following is a Class II antiarrhythmic drug:
 - Verapamil
 - Flecainide
 - Propranolol
 - Lidocaine
- Main mechanisms of action of cardiac glycoside is:
 - To increase vagal activity and inhibition of the Na^+ / K^+
 - To decrease vagal activity and inhibition of the Na^+ / K^+
 - To increase vagal activity and potentiates the activity of the Na^+ / K^+
 - None of the above
- Increased level of lipoprotein (a) predisposes to
 - Liver cirrhosis
 - Atherosclerosis
 - Nephritic syndrome
 - Pancreatitis
- Which of the following antianginal agents is a calcium channel blocker?
 - Nitroglycerin
 - Dipyridamole
 - Nifedipine
 - Minoxidil
- Which of the following drug reduces blood pressure by acting on vasomotor centers in the CNS:
 - Labetalol
 - Nifedipine
 - Clonidine
 - Enalapril
- Which of the following hormones is produced by the hypothalamic gland?
 - Estradiol
 - Growth hormone-releasing hormone (GHRH)
 - Glucagon
 - Aldosterone
- Currently used second-generation sulfonylureas include the following, EXCEPT:
 - Glibenclamide
 - Glipizide
 - Tolbutamide
 - Glimepiride
- Which of the following agent increases the absorption of iron from intestine?
 - Cyanocobalamin
 - Erythropoetin
 - Folic acid
 - Ascorbic acid
- Which of the following substances is synthesized in the intima of blood vessels is a strong inhibitor of platelet aggregation?
 - Thromboxane A₂ (TXA₂)
 - Prostacyclin (PGI₂)
 - Prostaglandin (PGE)
 - All of the above

11. Thiazolidinediones act by:
- Stimulating the beta islet cells of pancreas to produce insulin
 - {c} Reverse insulin resistance by stimulating GLUT4 expression and translocation
 - Reducing the absorption of carbohydrate from the gut
 - All of the above
12. Glucagon is
- {c} A single chain polypeptide containing 29 amino acid and molecular weight of 3500
 - A glycoprotein with a molecular weight of 600
 - A oligosaccharide
 - A small protein with a molecular weight of 5808 having disulphide linkage
13. The drug has a steroid – like structure which is responsible for its anti androgenic effect:
- Amiloride
 - Furosemide
 - Hydrochlorothiazide
 - {c} Spironolactone
14. Oxytocin produces the following effect:
- It causes contraction of the uterus
 - It brings milk ejection from the lactating mammary gland
 - It causes relaxation of the uterus
 - {c} Both A and B
15. Following drugs are Fluoroquinolones except
- Norfloxacin
 - Ciprofloxacin
 - Ofloxacin
 - {c} Nalidixic acid
16. The major natural estrogens produced by women are following EXCEPT:
- 17 β -Oestradiol
 - Oestradiol
 - {c} Ethinyl Oestradiol
 - Oestriol
17. Mifepristone (RU-486) is:
- {c} Ant progestin
 - Antiandrogen
 - Ant estrogen
 - Androgen
18. Streptokinase is chosen as part of the therapeutic regimen. Which of the following is its mechanism of action?
- It inhibits the conversion of fibrin to fibrin
 - It activates the conversion of fibrin-split products
 - {c} It activates the conversion of plasminogen to plasmin
 - It inhibits the conversion prothrombin to thrombin
19. Which of the following drug is inhibitor of thyroxin synthesis:
- Propylthiouracil
 - Methyliouracil
 - Methimazole
 - {c} All of the above
20. Combined oral contraceptives usually consists of an Oestrogen and
- A selective estrogen-receptor modulator
 - {c} A progestogen
 - An ant progestin
 - An androgen
21. Medical termination of pregnancy act was passed in
- {c} 1971

- b. 1969
c. 1977
d. 1980
22. is not mentioned in Dangerous Drugs act 1930.
- a. Coca leaf
b. Hemp
c. {c}Ergot
d. Opium
23. Application form no. is required for sale of drugs listed in schedule C and C1.
- a. 20
b. 21-A
c. {c}20-B
d. 22
24. D.P.C.O is abbreviation for
- a. {c}Drug price control order
b. Drug price cut order
c. Drug purchase control order
d. Drug purchase cut order
25. Digoxine is placed in Schedule
- a. E
b. X
c. G
d. {c}H
26. One of the following drug is not in schedule H
- a. Nalidixic acid
b. Naproxen
c. Nebivolol
d. {c}Phenometrazine
27. The guidelines to undertake clinical trial are stated in
- a. Schedule M1
b. Schedule N
c. Schedule R
d. {c}Schedule Y
28. The life period of Drug is mentioned in
- a. Schedule Q
b. {c}Schedule P
c. Schedule R
d. Schedule V
29. The provisions for production of Bacterial vaccine are mentioned in
- a. Schedule F-part IV
b. {c}Schedule F(I) –part I
c. Schedule F-part III
d. Schedule F-part IX
30. The term D.T.A.B. is short form for
- a. {c}Drug technical advisory board
b. Drug treatment analytical bureau
c. Drug tolerance addiction bureau
d. Drug technical Advisory bureau
31. Which one of the following drugs is placed under schedule X
- a. Ciprofloxacin
b. {c}Dexamphetamine
c. Paracetamol
d. Tolbutamide
32. The prescription in duplicate is required for the falling in
- a. Schedule H
b. {c}Schedule X
c. Schedule G
d. Schedule C-1
33. Pharmacy Act came in to force in the
- a. 1950
b. {c}1948

- c. 1952
d. 1949
34. The appointment of drugs inspector is as per the section of drugs and cosmetics act 1940.
- a. 19
b. 42
c. {c} 21
d. 30
35. The list of Ayurvedic and Unani poisonous drugs are mentioned in schedule.....
- a. C-1
b. G
c. {c} E-1
d. E
36. The designation of in charge of state drug laboratory is
- a. Drugs controller
b. Assistant drugs controller
c. {c} Government analyst
d. Drugs inspector
37. Wholly or partly substituted drug preparations by another substance or product is known as
- a. Spurious drugs
b. {c} Adulterated drugs
c. Poisonous drugs
d. Misbranded drugs
38. First pharmacy council of India was constituted in following year
- a. {c} 1949
b. 1948
c. 1960
d. 1953
39. The tenure of nominated members on the central pharmacy council is for
- a. Three years
b. Six years
c. {c} Five years
d. Two years
40. 'Registered Pharmacist' means
- a. A person passed Diploma in Pharmacy
b. A person who is working as Compounder
c. {c} A person whose name is Registered in state register
d. A person who is a member of Central pharmacy council
41. Two electrons occupying the same orbital have different
- a. Principal Quantum Number
b. Azimuthal Quantum Number
c. Magnetic Quantum Number
d. {c} Spin Quantum Number
42. Silicon and Germanium in the pure state are
- a. {c} Non-Conductors
b. Good conductors
c. Metallic conductors
d. Metal Complexes
43. The water free from all ions is referred to as
- a. Heavy water
b. Concentrated water
c. Mineral water
d. {c} Dematerialized water
44. The resultant colour for the limit test for lead is
- a. Red
b. Green
c. {c} Violet
d. Orange

45. The Aluminium Hydroxide comes under the category of
- Cathartic
 - {c} Antacid
 - Adsorbent
 - Astringent
46. Phenobarbitone is used in
- {c} Grandmal and Psychomotor Epilepsy
 - Partial Epilepsy
 - Parkinson's Disease
 - Analeptic
47. Selective α_1 Receptor Antagonist is
- Pronethalol
 - {c} Prazocin
 - Propranolol
 - Practolol
48. Reversible cholinergic inhibitor is
- Isoflurophate
 - Paraoxon
 - {c} Physostigmine
 - Tetraethyl Pyrophosphate
49. Maximum Diuretic Activity of meta disulfamoyl benzene is shown when the R group is
- Cl^- , Br^-
 - H^+ , Na^+
 - Both
 - None
50. Plasma protein binding of Hydrochlorothiazide is
- 80-90%
 - 90-95%
 - 60-70%
 - 70-75%
51. When morphine is heated at 140°C under pressure with strong Hydrochloric acid it converts into
- Morphinone
 - {c} Apomorphine
 - Codeine
 - Oxymorphine
52. Choose the IUPAC name of Carbamazepine
- 5-[3(dimethyl amino) ethyl] 10-11 dihydro – 5 H dibenz (b, f) azepine
 - {c} 5 H dibenz (b, f) azepine -5- carboxamide
 - 5 H dibenz (b, f) azepine -5- acid chloride
 - 5[3- dimethyl amino propyl] 10-11 dihydro – 5H dibenz (b,f) azepine
53. Which one of the following is not a pharmacological effect of Morphine?
- Constriction of pupil
 - CNS Depression
 - {c} Diarrhoea
 - Respiratory Depression
54. The gonadal hormones like estrogens, androgens and progestins bind with.
- {c} Receptors located in the cytoplasm
 - Receptors located in the nucleus of the cell
 - Receptors located in the contractile vacuoles
 - None of the above
55. How many optical isomers are possible for lactic acid
- {c} 2
 - 4
 - 6
 - 8
56. Which of the following classes of compounds are unreactive towards Sulphuric acid

- a. {c} Alkanes
 b. Alcohols
 c. Alkenes
 d. Alkynes
57. Which of the following compounds have planer molecules
 a. {c} 1,3-Butadiene
 b. Dimethyl Ether
 c. 1-Butene
 d. Allene
58. Which of the bonds in ethyl alcohol ($\text{CH}_3\text{CH}_2\text{OH}$) will most readily undergo heterolytic bond
 a. {c} O – H
 b. C – H
 c. C – O
 d. C – C
59. The reaction of Ethanol with one equivalent of methanol and a trace of an acid will give.
 a. Acetal
 b. {c} Hemiacetal
 c. Ketal
 d. Hemiketal
60. Solubility of unionized drug increases with
 a. Always with increase in temperature
 b. Always with increase in pressure
 c. {c} Majority of time with increase in temp
 d. Always with increase in pH
61. Drugs having pKa between 2.5 to 6.0 remain
 a. Ionized in gastric pH and unionized in intestinal pH
 b. Unionized in gastric pH
 c. Ionized at all pH values
 d. {c} Practically unionized at all pH value
62. Surface tension is measured by
 a. {c} Capillary rise method
 b. Cone and plate method
 c. Anderson pipette method
 d. All of the above
63. Following is associated with colloidal dispersion stability
 a. {c} Schulze-Hardy rule
 b. Hildebrand constant
 c. Huckel's rule
 d. None of the above
64. Which of the following statement is true
 a. Surface tension is sudden expansion of the surface
 b. {c} Surface tension increases with increases in the downward pull of molecules in the water
 c. Surface tension is equal to maximum, free energy
 d. Surface tension has units of N
65. Which of the following are not kinetic properties?
 a. Brownian Motion
 b. Osmotic Pressure
 c. {c} Ionization
 d. Both a and b
66. Which of the following statement is true
 a. {c} Haunser ratio of < 1.25 indicates a powder that is free flowing where > 1.25 indicates poor flow ability
 b. Haunser ratio of >1.25 indicates a powder that is free flowing where < 1.25 indicates poor flow ability
 c. The larger the Carr's index the better the flow properties

- d. Angle of repose $> 40^\circ$ indicates a powder that is free flowing
67. True density is
- Mass/volume excluding inter particulate or intra particulate spaces
 - Mass/volume excluding inter particulate spaces
 - {c} Mass/volume excluding inter particulate and intra particulate spaces
 - None of the above
68. The critical micelle concentration influences
- Conductivity
 - Viscosity
 - Surface tension
 - {c} All of the above
69. Nonlinear drug distribution in body is due to
- Drug following one compartment model
 - Drug distribution only in central compartment
 - {c} Drug distribution in central and peripheral compartments
70. Non-Newtonian shows which behaviour
- Linear
 - {c} Non-linear
 - Both linear and non-linear
 - None of the above
71. Which one of the following is used as suppository base
- Cocoa butter
 - Polyethylene glycol
 - Adepes solids
 - {c} All of the above
72. Which one is not the purpose of Enteric coating is
- {c} To increase bioavailability of drug
 - To prevent drug degradation in stomach
 - To prevent gastric irritation caused by drug
 - For local action of the drug in intestine
73. Oral absorption is ideal when
- $\log P > 5$
 - {c} $\log P < 5$
 - There are more than 5 hydrogen bond donors
 - Molecular weight > 500 Dalton
74. Disintegration test for tablets is not done in cases?
- Effervescent tablets
 - Sugar coated tablets
 - Film coated tablets
 - {c} Controlled release tablets
75. Which one of the following is USP-IV dissolution apparatus?
- Paddle Apparatus
 - Paddle Over Disc
 - {c} Flow-Through Cell
 - Reciprocating Cylinder
76. A drug having plasma half-life of 24 hrs and follows one compartment model is formulated as a 25 Mg tablet. What will be % of drug will remain in plasma on 4th day?
- {c} 12.5
 - 25
 - 50
 - 6.25
77. Ratio of systemic availability of a drug administered orally and I.V. is called
- {c} Absolute bioavailability
 - Relative bioavailability
 - Dynamic bioavailability
 - None

78. Following device can be used for in line and off-line to weight and sort a complete batch of capsules
- Varicap
 - Rotofull
 - {c}Rotosort
 - All of the above
79. Total organic carbon limit for water for injection is
- {c}<500ppb
 - <5000ppb
 - <50ppb
 - <1000ppb
80. Andrographolides are found in
- Cinchona
 - Datura
 - {c}Kalmegh
 - Gentian
81. Cinnamon oil contains Cinnamaldehyde and Eugenol in following ratios.
- 60 – 70% and 05 – 07%
 - 60 – 70% and 25 – 25%
 - {c}60 – 70% and 05 – 10%
 - 60 – 70% and 01 – 04%
82. The commercial source of Rauwolfia root for preparation of Reserbine is
- {c} Rauwolfia vomitoria
 - Rauwolfia tetraphyla
 - Rauwolfia obscura
 - Rauwolfia serpentine
83. The amino acid employed as precursor for quinine a quinoline alkaloid is
- Tyrosine
 - {c}Tryptophan
 - Serine
 - Lysine
84. The biological source for physostigmine from physostigman venonesum is.....
- {c} Dried seeds
 - Dried leaves
 - Fresh bark
 - Fresh flowers
85. The content of clay in Loamy soil is.....
- 05 -07%
 - {c}30 – 50%
 - 20 - 40%
 - 10 – 25%
86. The chemical constitution of Kaolin is
- {c} Hydrated Aluminium Silicate
 - Hydrated Ferrous Aluminium Silicate
 - Hydrate Magnesium trisilicate
 - Hydrated Aluminium Calcium Silicate
87. Irregular celled stomata are present in the leaves of
- {c} Buchu
 - Spearmint
 - Belladonna
 - Senna
88. The constituents of Stereo glycol Alkaloid type are present in
- Aerial part of Polygala Senega
 - Inner bark of Quillaia saponaria
 - Ripened fruits of Tribulus terrestris
 - {c} Aerial part of Solanum khasianum
89. The main constituent of Cascare grade are of
- Steroidal

- b. {c} Anthraquinone
c. Napthoquinone
d. Cyanophoric
90. In mixing process the critical step is
a. Time of mixing
b. Speed of stirrers
c. Load of materials
d. {c} All of the above
91. Precision refers to
a. Degree of responsibility
b. {c} Degree of reproducibility
c. Degree if repeatability
d. None of the above
92. As per ICH guidelines for establishment of linearity minimum number of concentration required is
a. 10
b. 04
c. {c} 05
d. 03
93. Guideline on general principles of process validation was made available and the same was finished in
a. May 1987
b. May 1967
c. May 1986
d. May 1988
94. The training of operations involves
a. Knowledge
b. Skills
c. Attitude
d. {c} All of the above
95. The quality one for pharmaceutical industry in general are about
a. {c} 10 – 15%
b. 30 – 40%
c. 25 – 45%
d. 60 – 70%
96. Appraisal costs are the cost of
a. Inspection
b. Testing
c. Quality
d. {c} All of the above
97. In classification of water, level II water is
a. Well water
b. {c} Drinking water
c. Purified water
d. Water to parenterals
98. The drug regulatory authority CDSCO denotes
a. {c} Central drugs standards control organization
b. Central drugs standards council organization
c. Central for drug standards and cosmetic organization
d. None of the above
99. Robustness in validation refers to
a. {c} Analysis with respect to deliberate variation in method parameters
b. Repeated analysis on fixed parameters
c. Instrument to instrument variation
d. Measurement of personal errors