MADHYA PRADESH DRUG INSPECTOR Solved Paper 2012

Correct answer is indicated as {c}

- Which of the following is a Class IA ant arrhythmic drug:
- a. Sotalol
- b. {c}Disopyramide
- c. Verapamil
- d. Propranolol
- 2. Which of the following is a Class II A anti arrhythmic drug:
- a. Verapamil
- b. Flecainide
- c. {c}Propranolol
- d. Lidocaine
- 3. Main mechanisms of action of cardiac glycoside is:
- a. {c}To increase vagal activity and inhibition of the Na⁺ / K⁺
- b. To decrease vagal activity and inhibition of the Na^+/K^+
- c. To increase vagal activity and potentiates the activity of the Na⁺ / K⁺
- d. None of the above
- 4. Increased level of lipoprotein (a) predisposes to
- a. Liver cirrhosis
- b. {c}Atherosclerosis
- c. Nephritic syndrome
- d. Pancreatitis
- 5. Which of the following antianginal agents is a calcium channel blocker?
- a. Nitroglycerin
- b. Dipyridamole
- c. {c}Nifedipine
- d. Minoxidil
- 6. Which of the following drug reduces blood pressureby acting on vasomotor centers in the CNS:
- a. Labetalol
- b. Nifedipine
- c. {c}Clonidine
- d. Enalapril

7. Which of the following hormones is produced by the hypothalamic gland?

- a. Estradiol
- b. {c}Growth hormone-releasing hormone (GHRH)
- c. Glucagon
- d. Aldosterone
- 8. Currently used second-generation sulfonylureas include the following, EXCEPT:
- a. Glibenclamide
- b. Glipizide
- c. {c}Tolbutamide
- d. Glimepiride
- 9. Which of the following agent increases the absorption of iron from intestine?
- a. Cyanocbalamin
- b. Erythropoetin
- c. Folic acid
- d. {c}Ascorbic acid
- 10. Which of the following substances is synthesized in the intima of blood vessels is a strong inhibitor of platelet aggregation?
- a. Thromboxane A2 (TXA2)
- b. {e}Prostacyclin (PGI2)
- c. Prostaglandin (PGE)
- d. All of the above
- 11. Thiazolidinediones act by:
- a. Stimulating the beta is let cells of pancreas to produce insulin
- b. {c}Reverse insulin resistance by stimulating GLUT4 expression and translocation
- c. Reducing the absorption of carbohydrate from the gut
- d. All of the above

12. Glucagon is

- a. {c}A single chain polypeptide containing 29 amino acid and molecular weight of 3500
- b. A glycoprotein with a molecular of 600
- c. A oligosaccharide
- d. 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:
- a. Amiloride
- b. Furosemide
- c. Hydrochlorothiazide
- d. {c}Spironolactone
- **14.** Oxytocin produces the following effect:
- a. It causes contraction of the uterus

- b. It brings milk ejection from the lactating mammary gland
- c. It causes relaxation of the uterus
- d. {c}Both A and B

15. Following drugs are Fluoroquinolones except

- a. Norfloxacin
- b. Ciprofloxacin
- c. Oflxacin
- d. {c}Nalidixic acid

16. The major natural estrogens produced by women are following EXCEPT:

- a. 17β -Oestradiol
- b. Oestradiol
- c. {c}Ethinyl Oestradiol
- d. Oestriol

17. Mifeprostone (RU-486) is:

- a. {c}Ant progestin
- b. Antiadrogen
- c. Ant estrogen
- d. Androgen

18. Streptokinase is chosen as part of the therapeutic regimen. Which of the following is its mechanism of action?

- a. It inhibits the conversion of fibrin to fibrin
- b. It activates the conversion of fibrin-split products
- c. {c}It activates the conversion of plasminogen to plasmin
- d. It inhibits the conversion prothrombin to thrombin

19. Which of the following drug is inhibitor of thyroxin synthesis:

- a. Propylthiouracil
- b. Methyliouracil
- c. Methimazole
- d. {c}All of the above

20. Combined of al contraceptives usually consists of an Destrogen and

- a. A selective estrogen-receptor modulator
- b. {c}A progestogen
- c. An ant progestin
- d. An androgen

21. Medical termination of pregnancy act was passed in

- a. {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

- a. E
- b. X
- c. G
- d. {c}H

26. One of the following drug is not in schedule if

- 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

- G 1 1
- a. Schedule Q
- b. {c}Schedule Pc. Schedule R
- d. Schedule V

29. The provisions for production of Bacterial vaccine are mentioned in

- a. Schedule F-part IV
- b. {c}Scheule 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 productes 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
- 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

- a. Cathartic
- b. {c} Antacid
- c. Adsobant
- d. Astringent

46. Phenobarbitone is used in

- a. {c} Grandmal and Psychomotor Epilepsy
- b. Petitmal Epilepsy
- c. Parkinson's Disease
- d. Analeptic

47. Selective α1Receptor Antagonist is

- a. Pronethalol
- b. {c} Prazocin
- c. Propranolol
- d. Practolol
- 48. Reversible cholinergic inhibitor is
- a. Isoflurophate
- b. Paraoxon
- c. {c} Physostigmine
- d. Tetraethyl Pyrophosphate

49. Maximum Diuretic Activity of meta disulfamoyl benzene is shown when the R group is

- a. Cl-, Br-
- b. H⁺, Na⁺
- c. Both
- d. None

50. Plasma protein binding of Hydrochlorothiazide is

- a. 80-90%
- b. 90-95%
- c. 60-70%
- d. 70-75%

51. When morphine is heated at 140°C under pressure with strong Hydrochloric acid it converts into

- a. Morphinone
- b. {c}Apomorphine
- c. Codeine
- d. Oxymorphine

52. Choose the IUPAC name of Carbamazepine

- a. 5-[-3(dim ethyl amino) ethyl] 10-11 dihydro 5 H dibenz (b, f) azepine
- b. {c}5 H dibenz (b, f) azepine -5- carboxamide
- c. 5 H dibenz (b, f) azepine -5- acid chloride
- d. 5[3- dim ethyl amino propyl] 10-11 dihydro 5H dibenz (b,f) azepine

53. Which one of the following is not a pharmacological effect of Morphine?

- a. Constriction of pupil
- b. CNS Depression
- c. {c} Diarrhoea
- d. Respiratory Depression

54. The gondal harmones like estrogens, androgens and progesting bind with.

- a. {c} Receptors located in the cytoplasm
- b. Receptors located in the nucleus of the cell
- c. Receptors located in the contractile vacuoles
- d. None of the above
- 55. How many optical isomers are possible for lactic acid
- a. {**c**}2
- b. 4
- c. 6
- d. 8
- 56. Which of the following classes of compounds are uncreative 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 (CH₃ CH₂ 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
- 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° indicates a powder that is free flowing

67. True density is

- a. Mass/volume excluding inter particulate or intra particulate spaces
- b. Mass/volume excluding inter particulate spaces
- c. {c} Mass/volume excluding inter particulate and intra particulate spaces
- d. None of the above

68. The critical micelle concentration influences

- a. Conductivity
- b. Viscosity
- c. Surface tension
- d. {c}All of the above

69. Nonlinear drug distribution in hody is due to

- a. Drug following one compartment model
- b. Drug distribution only in central compartment
- c. {c} Drug distribution in central and peripheral compartments
- 70. Non-Newtonian shows which behavious
- a. Linear
- b. {c}Non-linear
- c. Both linear and non-linear
- d. None of the above
- 71. Which one of the following is used as suppository base
- a. Coca butter
- b. Polyethylene glycol
- c. Adepes solids
- d. {c} All of the above

72. Which one is not the purpose of Enteric coating is

- a. {c}To increases bioavailability of drug
- b. To prevent drug degradation in stomach
- c. To prevent gastric irritation caused by drug
- d. For local action of the drug in intestine

73. Oral absorption is ideal when

- a. Log P>5
- b. {c} Log P<5
- c. There are more than 5 hydrogen bond donors
- d. Molecular weight > 500 Dalton

74. Disintegration test for tablets is not done in cases?

- a. Effervescent tablets
- b. Sugar coated tablets
- c. Film coated tablets
- d. {c}Controlled release tablets

75. Which one of the following is NSP-IV dissolution apparatus?

- a. Paddle Apparatus
- b. Paddle Over Disc
- c. {c} Flow-Through Cell
- d. Reciprocating Cylinder

76. A drug having plasma half-life of 24 hrs and follows one ampartment model is formulated as a 25 Mg tablet. What will be % of drug will remain in plasma on 4th day?

- a. {c} 12.5
- b. 25
- c. 50
- d. 6.25

77. Ratio of systemic availability of a drug administered orally and I.V. is called

- a. {c} Absolute bioavailability
- b. Relative bioavailability
- c. Dynamic bioavailability
- d. None

78. Following device can be used for in line and off-line to weight and sort a complete batch of capsules

- a. Varicap
- b. Rotofull
- c. {c}Rotosort
- d. All of the above

79. Total organic carbon limit for water for injection is

- a. {c}<500ppb
- b. <5000ppb
- c. <50ppb
- d. <1000ppb

80. Andrographolides are found in

- a. Cinchona
- b. Datura
- c. {c}Kalmegh
- d. Gentian

81. Cinnamon oil contains Cinnamaldehyde and Eugenol in following ratios

- a. 60 70% and 05 07%
- b. 60 70% and 25 25%
- c. $\{c\}60 70\%$ and 05 10%
- d. 60 70% and 01 04%

82. The commercial source of Rauwolfia root for preparation of Reserbine is

- a. {c} Rauwolfia vomitoria
- b. Rauwolfia tetraphyla
- c. Rauwolfia obscura
- d. Rauwolfia serpentine

83. The amino acid employed as precursor for quinine a quinoline alkaloid is

- a. Tyrosine
- b. {c}Tryptophan
- c. Serine
- d. Lysine

84. The biological source for physostigmine from physostigman venonesum is......

- a. {c} Dried seeds
- b. Dried leaves
- c. Fresh bark
- d. Fresh flowers
- 85. The content of clay in Loamy soil is......
- a. 05 -07%
- b. $\{c\}30 50\%$
- c. 20 40%
- d. 10 25%
- 86. The chemical constitution of Kaolin is
- a. {c} Hydrated Aluminium Silicate
- b. Hydrated Ferrous Aluminium Silicate
- c. Hydrate Magnesium trisilicate
- d. Hydrated Aluminium Calcium Silicate
- 87. Irregular celled stomata are present in the leaves of
- a. {c} Buchu
- b. Spearmint
- c. Belladonna
- d. Senna

88. The constituents of Stereo glycol Alkaloid type are present in

- a. Aerial part of Polygala Senega
- b. Inner bark of Quillaia saponaria
- c. Ripened fruits of Tribules terestris
- d. {c} Aerial part of Solanum khasianum

89. The main constituent of Cascare grade are of type glycosides.

- a. 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
- 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

