

## National Institute of Pharmaceutical Education and Research Joint Entrance – 2018

**PLEASE NOTE:** The questions contained in the given question paper are completely memory-based. These Questions may or may not match the actual question paper.

1. Dr. B.C. Ray Award is for
  - a) Medicine
  - b) Journalism
  - c) Pharmacy
  - d) Physics
  
2. What is protein content of spirulina
  - a) 20-30%
  - b) 70-90%
  - c) 50-70%
  - d) 90-100%
  
3. For what “Golden Rice” were promoted
  - a) Vit - D
  - b) Vit - A
  - c) Vit - E
  - d) Vit - C

4. Selegiline is

- a) Contraindicated in Parkinson's disease
- b) Given in Parkinson's disease and have peripheral alkyne group
- c) Given in Parkinson's disease and have internal alkyne group
- d) None

5. Fluconazole is having ring

- a) Imidazole(1,3)
- b) Triazole (1,2,3)
- c) Triazole (1,2,5)
- d) Triazole (1,3,5)

6. Coumarin ring is

- a) 2-Benzyl benzopyran - 4 one
- b) Chromen-2-one
- c) 2-benzopyran-2-one
- d) None

7. Which one is used as bitter

- a) Kalmegh
- b) Glycyrrhiza
- c) Senna
- d) Digitalis

8. What is the family of liquorice

- a) Apocynaceae
- b) Rubiaceae
- c) Fabaceae
- d) Liliaceae

9. When the world Diabetes Day is celebrated

- a) 14 November
- b) 1 July
- c) 19 October
- d) 14 April

10. Indicates used in Fajan's titration

- a) Dichlorofluorescein
- b) Eriochrome Black - T
- c) Crystal Violet
- d) All are correct

11. Which one of the following is BCS class IV drugs

- a) Taxol
- b) Nafidipine
- c) Verapamil
- d) Insulin

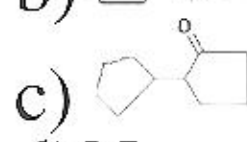
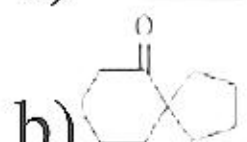
12. The dissolution apparatus (USP) used for BCS class IV drugs

- a) USP - I
- b) USP - II
- c) USP - III
- d) USP - IV

13. Who discovered antibiotic Aureomycin

- a) Robert Koch
- b) Alexander Fleming
- c) Yellapragada Subbarow
- d) Robert hook

14. What is the product of the given compound in Pinacol-pinacolone rearrangement



d) None of the above

15. The elimination rate depends upon

- a) Plasma  $t_{1/2}$
- b) Absorption rate

- c) Peak plasma concentration
- d)  $V_d$

16. The brand name of Adalimumab which is produced by Abbott laboratories

- a) Humira
- b) Ilumya
- c) Aimovig
- d) Crysvida

17. The eye piece used in electron microscope is made up of

- a) Magnetic coil
- b) Steel sheet
- c) Quartz
- d) Glass

18. Residual solvent in pharmaceutical products is detected by

- a) GC
- b) HPLC
- c) TLC
- d) IR

19. The most common binder used with silica gel is

- a) Calcium sulphate
- b) Calcium Carbonate
- c) Acacia
- d) Starch

20. Which one of the following does not contains imidazole ring

- a) Fluconazole
- b) Clotrimazole
- c) Econazole
- d) Fluconazole

21. Which of the following is caused due to deficiency of factor VIII

- a) Haemophilia - A
- b) Haemophilia - B
- c) Diabetes
- d) Cancer

22. Which of the following is Neurodegenerative disease

- a) Paget's disease
- b) Goiter
- c) Addison disease
- d) Creutzfeldt- Jakob disease

23. Which of the following is not used as pharmaceutical preservative

- a) Acetic acid
- b) Citric acid
- c) Salicylic acid
- d) Benzoic acid

24. Resolution of microscope

- a) Decrease with increase in RI
- b) Increase with increase in RI
- c) Remains constant
- d) Not fix

25. Which of the following is important for synthesis of thrombin

- a) Vitamin - C
- b) Vitamin - K
- c) Vitamin A
- d) Vitamin E

26. Isoniazid activated by.....enzyme in microbe

- a) Kat- G
- b) Kat -A
- c) Kat- C
- d) Kat- D

27. Which of the following is not a vector in genetic engineering

- a) PAC
- b) SAC
- c) YAC
- d) BAC

28. First genetically engineered plant was

- a) Tobacco
- b) *Oryza sativa*
- c) *Triticum aestivum*
- d) Potato

29. Which heterocyclic ring present in porphyrin

- a) Pyridine
- b) Pyrrole
- c) Pyridine
- d) Imidazole

30. Regulatory body of Japan

- a) ANVISA
- b) IFDA
- c) PMDA
- d) FDA

31. Gallic acid and Catechin present in which tanins

- a) Pseudo tannins
- b) Hydrolysable tannins
- c) Condensed tannins
- d) Non-hydrolysable tannins



32. Which is the system for ADR monitoring used by USFDA

- a) Medwatch
- b) Medline
- c) Rx
- d) None

33. Rickets occurs due to

- a) Bacteria
- b) Virus
- c) Unpaired metabolism of vit-D
- d) Unpaired metabolism of vit-C

34. In titration of Ferrous gluconate tablet following is used as indicator

- a)  $\text{KMnO}_4$
- b) Ascorbic acid
- c) Ferric ammonium nitrate
- d) HC

35. Number of carbon atom in stearic acid

- a) 16
- b) 13
- c) 14
- d) 18

36. Geranyl geranyl pyrophosphate is used for biosynthesis of

- a) Alcohol
- b) Glycoides
- c) Terpenoids
- d) Tannins

37. Number of isoprene units present in monoterpenes

- a) 2
- b) 1
- c) 3
- d) 4

38. Number of isoprene units present in triterpenes

- a) 6
- b) 3
- c) 5
- d) 30

39. Who founded Oxygen

- a) Ranstay
- b) Priestley
- c) Raman
- d) Bentley

40. Which of the following does not contain any hetrocyclic ring

- a) Nalidixic acid
- b) Famoxifin
- c) Celexocib
- d) All

41. Water in pharmaceutical preparation cam be estimated by which reagent

- a) Karl fischer reagent
- b) Potentiometry
- c) Conductometry
- d) Polarography

42. Which of the following is known as universal detector in HPLC

- a) Flame irrigation detector
- b) RI detector
- c) UV spectroscopy
- d) All of the above

43. Enzyme lipase is active at which pH in stomach

- a) 2-4
- b) 4-5
- c) 4-7
- d) 8-9

44. Which of the following is soft ionization technique used in MS

- a) Fast Atom Bombardment (FAB)
- b) Electrospray ionization (ESI)
- c) Atmospheric Pressure Chemical Ionization (APCI)
- d) Electron Impact ionization (EI)

45. All are phase-1 Rxn except

- a) Oxidation
- b) Reducation
- c) Acetylation
- d) Hydrolysis

46. Organ most important for phase-II reaction

- a) Liver
- b) Skin
- c) Small intestine
- d) Kidney

47. Synonyms of Ashwagandha

- a) Indian balmony
- b) Madhunashini
- c) Devil dang
- d) Winter Cherry

48. The C content of DNA is 35% what is content of T

- a) 35%
- b) 15%
- c) 75%

d) 30 %

49. Bradikineia is characterized by

- a) Slowness in Movement
- b) Prepared muscular
- c) Fast movement
- d) Involuntary

50. Which is major compound of cotton

- a) Cellulose
- b) Catechin
- c) Waxes
- d) Pectic acid

51. In the HLB value is very high, the compound is likely to used as

- a) Solubility enhances
- b) o/w emulsifies
- c) w/o emulsifies
- d) Wetting agent

52. Paralysis agitans is synonyms of

- a) Parkinsonism
- b) Alzheimer's disease
- c) Henson's disease
- d) Paget's disease

53. Nipah Virus is spread from... of particular genus)

- a) Henipavirus
- b) Myxovirus

- c) Abedovirus
- d) Retrovirus

54. Pack year is related to

- a) COPD
- b) Prostate
- c) Diabetes
- d) Alzheimer

55. 4th generation cephalosporin name

- a) Cephazoline
- b) Cephaclo
- c) Cefepime
- d) Cefoxitin

56. Phase-1 reaction occur in

- a) Cytoplasm
- b) ER
- c) Mitochondria
- d) None of the above

57. Acid azide converted to isocyanide

- a) Claisen Rearrangement
- b) Curtius rearrangement
- c) Beckmann rearrangement
- d) All of them above

58. Higuchi plot is draw between

- a) Q and  $t^{1/2}$
- b)  $t/Q$
- c) Q and M
- d) None of the above

59. Heckle plot is used to measure

- a) Compression preparation
- b) Compaction preparation
- c) Granulation preparation
- d) All of the above

60. DPCO Act was passed in the year

- a) 1995
- b) 1975
- c) 1895
- d) 1998

61. Position of N in Purine ring

- a) 1,2,3
- b) 1,3,7
- c) 1,3,8
- d) 1,5,7

62. Reagent used in Liebermann burchard test is

- a) Acetic Anhydride
- b) Boric acid
- c) Hydrochloric acid
- d)  $H_2SO_4$

63. NDA is done after

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

64. Characteristic of prokaryotic cell is

- a) No nucleus envelope
- b) Multicellular
- c) Ribosome 80S
- d) Cell division by mitosis

65. A is two years older than B who is twice as old as C. If the total ages of A, B and C be 27. what is the age of B

- a) 12 years
- b) 10 years
- c) 8 years
- d) 14 years

66. The condition when person is in dream state (hallucination) and it is difficult to differ between dream and reality is caused due to

- a) Psychedelics
- b) Nootropics
- c) Neuroleptics
- d) All are correct



67. Ibuprofen comes under schedule

- a) G
- b) H
- c) X
- d) C<sub>1</sub>

68. St. John's wort is the synonyms of

- a) Hypericum
- b) Belladonna
- c) Rauwolfia
- d) Nux vomica

69. Following adrenergic receptor possess anabolic effect

- a)  $\alpha_1$
- b)  $\alpha_2$
- c)  $\beta_1$
- d)  $\beta_2$

70. Which is microbial insecticide

- a) Bacillus thuringiensis
- b) Bacillus subtilis
- c) Bacillus coagulans
- d) All are correct

71. Bacteriophage contain which enzyme

- a) Lysozyme
- b) Urease
- c) Ligase
- d) Lipase

72. Supreme commander of armed force is

- a) President of India
- b) Prime minister of India
- c) Lieutenant General
- d) Major General

73. .com is start form of

- a) Communication
- b) Commercial
- c) Common
- d) None of them above

74. How many grams of NaOH are needed to make 100 mL of a 0.5 M solution of NaOH

- a) 2 gm
- b) 4 gm
- c) 6 gm
- d) 8 gm

75. In case of proteinurea which of the following is excreted in urine

- a) Acetone and hydroxy butyrate
- b) Albumin, Haemoglobin
- c) Urea
- d) Glucose

76. The 1<sup>st</sup> isotherm is explained by with equation
- a) BET
  - b) Kelvin
  - c) Langmuir
  - d) None of the above
77. Principle involved in pH meter
- a) Potentiometry
  - b) Conductometry
  - c) Amperometry
  - d) None
78. Drug having seven membered ring
- a) Pioglitazone
  - b) Trimipramine
  - c) Caffeine
  - d) Timolol
79. Inversion of sucrose can be estimated by
- a) Polarimeter
  - b) Potentiometry
  - c) Conductometry
  - d) Amperometry
80. Which of the following is not for calculating child dose
- a) Young's formula
  - b) Clerks
  - c) Dale's
  - d) Fries formula

81. Aniline produced in

- a) Hoffmann bromamide Rx<sup>n</sup>
- b) Ulmann Reaction
- c) Aldol condensation
- d) None



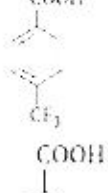
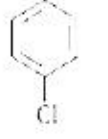
82. Which one is used to make new genes by using unrelated genes

- a) Genetic engineering
- b) Recombinate DNA technology
- c) Gene therapy
- d) All of these

83. Which of the following is not the organells of Glycolate pathway

- a) Cytosol
- b) Mitochondria
- c) ER
- d) Peroxysome

84. Which one is most acidic

- a) 
- b) 
- c) 
- d) 

85. What is common between Ribozyme and enzyme

- a) Both are proteins
- b) Both acts as catalyst of  $Rx^n$
- c) Both reduces rate of rxn
- d) None

86. Catachin come under

- a) Flavanols
- b) Flavone
- c) Flavanones
- d) Anthocyanine

87. Volatile oil in compounds is estimated by

- a) GC
- b) HPLC
- c) UV Spectroscopy
- d) TLC

88. What is angle between hour and minute clock when watch shows time 4:20

- a)  $0^\circ$
- b)  $10^\circ$
- c)  $5^\circ$
- d)  $15^\circ$

89. Antonym of mountain would be

- a) Valley
- b) Plateaus
- c) Plains
- d) Dome

90. What is the difference between the sterile water and purified water used in parenterals

- a) Sterile water is free from pyrogens
- b) Sterile water is free from CO<sub>2</sub>
- c) Sterile water is prepared by distillation
- d) None of these

91. Which one of the following is destructive

- a) GC
- b) HPLC
- c) Mass Spectroscopy
- d) UV-Spectroscopy

92. In indicator was prepared by mixing phenolprotein, Methyl Orange, Methyl Red given along with molar Concentrations the indicator will be used in

- a) To estimate approx pH in colorimetry
- b) Quantitative estimation
- c) Acid-base titrations
- d) Potentiometer titrations

93. Which parameter in polarography does not depend upon the substrate concentration.

- a) Limiting current
- b) Decomposition potential
- c) Half-wave potential
- d) Residual current

94. Which of the antibody is involved in the first line defence

- a) IgG
- b) IgA
- c) IgE
- d) IgM

95. Nitro group is an electron withdrawing group, It directs the incoming group to the following position for electrophilic substitution reactions

- a) Ipsa position
- b) Ortho position
- c) Para position
- d) Meta position

96. Which intermediate is formed in Wittig's reaction

- a) Aldehyde
- b) Ketone
- c) Betaine
- d) Alcohol

97. Cerebral malaria is treated by

- a) Quinine
- b) Primaquine
- c) Artemisin
- d) Chioroquine

98. GFR value for both kidneys is about

- a) 120 ml per min
- b) 250 ml per min
- c) 185 ml per min
- d) 150 ml per min

99. Hybridization state present in carbanion is

- a)  $sp^3$
- b)  $sp^2$
- c)  $sp$
- d)  $sp^3d^2$

100. Muscarinic receptor agonist is

- a) Tiotropium bromide
- b) Tropicamide
- c) Bethanechol
- d) Atropine