

# Question Papers

ExamCode: RPSC\_CH\_PHARM

1. **Hypsochromic shift is also called as \_\_\_\_\_.**
  - 1) yellow shift
  - 2) Blue shift
  - 3) Red shift
  - 4) Violet shift
2. **The unit of Wavelength is \_\_\_\_\_.**
  - 1)  $\text{cm}^{-1}$
  - 2) m
  - 3)  $\text{L}^{-1}$
  - 4)  $\text{km}^{-1}$
3. **Bathochromic shift is also called as \_\_\_\_\_.**
  - 1) Yellow shift
  - 2) Blue shift
  - 3) Red Shift
  - 4) Green shift
4.  **$1^\circ \text{A}$  is equal to**
  - 1)  $10^{-6}$  m
  - 2)  $10^{-7}$  m
  - 3)  $10^{-8}$  m
  - 4)  $10^{-10}$  m
5. **Which one is not the detector of Gas chromatography?**
  - 1) T.C.D.
  - 2) C.C.D.
  - 3) F.I.D.
  - 4) A.I.D.
6. **Which one is most widely used electrode?**
  - 1) Hydrogen electrode
  - 2) Calomel electrode
  - 3) Antimony electrode
  - 4) Glass electrode
7. **Which one is not used in Gas chromatography?**
  - 1) Packed column
  - 2) Open tubular column
  - 3) S.C.O.T. column
  - 4) Guard column
8. **If analytical work has to be carried out in U.V. region, cuvette must be made up of...**
  - 1) Gelatin
  - 2) Glass
  - 3) Plastic
  - 4) Quartz
9. **Pre-mix burner is also known as \_\_\_\_\_.**
  - 1) Total consumption burner
  - 2) Mecker burner
  - 3) Laminar flow burner
  - 4) Bunsen burner
10. **Which one is not detected by flame photometer?**
  - 1) Ca
  - 2) Na
  - 3) K
  - 4) As
11. **Chopper is used in which instrument?**
  - 1) H.P.T.L.C.
  - 2) H.P.L.C.
  - 3) Single beam photometer
  - 4) A.A.S.
12. **Which one is not used as a carrier gas in Gas chromatography?**
  - 1) Carbon dioxide
  - 2) Hydrogen
  - 3) Helium
  - 4) Nitrogen
13. **The source of radiation used in Infra red spectroscopy \_\_\_\_\_.**
  - 1) Nernst glower
  - 2) Sodium lamp
  - 3) Deuterium discharge lamp
  - 4) Tungsten lamp

14. Choose the correct pair:

Instruments		Key Parts	
a	H.P.L.C.	1	Monochromator
b	A.A.S.	2	Dropping mercury electrode
c	Polarography	3	Isocratic pump
d	Infra red	4	Hollow cathode lamp

  

	a	b	c	d
A.	3	4	2	1
B.	1	2	3	4
C.	2	3	4	1
D.	2	1	4	3

15. Choose the correct pair:

Analytical property		Instrument	
a	Absorption of radiation	1	D.S.C.
b	Scattering of radiation	2	A.A.S.
c	Mass to charge ratio	3	Turbidimeter
d	Thermal property	4	Mass spectrometer

  

	a	b	c	d
A.	1	2	3	4
B.	2	3	4	1
C.	4	1	2	3
D.	3	4	1	2

16. Chemically Mayer's reagent is \_\_\_\_\_.

- |                              |                             |
|------------------------------|-----------------------------|
| 1) Potassium mercuric iodide | 2) Potassium bismuth iodide |
| 3) Iodine solution           | 4) Picric acid              |

17. What is Wagner's reagent?

- |                     |                                  |
|---------------------|----------------------------------|
| 1) Picric acid      | 2) Iodine in potassium iodide    |
| 3) Ammonia solution | 4) P – dimethylaminobenzaldehyde |

18. In N.M.R., which solvent is used as a reference solvent?

- |            |           |
|------------|-----------|
| 1) T.M.S.  | 2) Water  |
| 3) Ethanol | 4) C.M.C. |

19. Which reagent is used to detect phenolic compounds?

- |                            |                                |
|----------------------------|--------------------------------|
| 1) Vanillin sulphuric acid | 2) Dragondroff                 |
| 3) Ninhydrin               | 4) Methanolic Ferric chloride. |

20. Wij's solution is used in analysis of which parameter?

- |                   |                         |
|-------------------|-------------------------|
| 1) Acid value     | 2) Saponification value |
| 3) Peroxide value | 4) Iodine Value         |

21. Select the correct pair:

a	Visible radiation	1	200 to 400 n.m.
b	Near U.V	2	2.5 to 50 $\mu\text{m}$
c	Middle I.R.	3	0.75 to 2.2 $\mu\text{m}$
d	Near I.R.	4	400 to 750 n.m.

  

	a	b	c	d
A.	4	1	2	3
B.	2	3	4	1
C.	3	4	2	1
D.	1	2	3	4

22. Select the correct pair:

Group-I		Group-II	
a	U.V.	1	Tungsten filament lamp
b	Visible	2	Hydrogen discharge lamp
c	I.R.	3	Hollow cathode lamp
d	A.A.S.	4	Nernst Glower

  

	a	b	c	d
A.	1	2	3	4
B.	3	4	2	1
C.	2	1	4	3
D.	4	3	2	1

23. Select the correct pair:

Group-I		Group-II	
a	Ninhydrin	1	Alkaloids
b	Dragondroff	2	Amino acids
c	Ferric chloride	3	Phenolic compounds

  

	a	b	c
A.	3	2	1
B.	2	1	3
C.	2	3	1
D.	1	2	3

24. The theory of nebulisation is associated with\_\_\_\_\_.

- |                 |               |
|-----------------|---------------|
| 1) Nephelometry | 2) A.A.S.     |
| 3) Fluorimetry  | 4) Titrimetry |

25. Which one is not the analytical parameter for “Avaleha” preparation?

- |                    |                  |
|--------------------|------------------|
| 1) L.O.D.          | 2) Ash value     |
| 3) Alcohol content | 4) Sugar content |

26. Which one is not the analytical parameter for “Churna” preparation?

- |                               |                             |
|-------------------------------|-----------------------------|
| 1) Total solid content        | 2) Water soluble extractive |
| 3) Alcohol soluble extractive | 4) Mesh analysis            |

27. Which schedule contains different types of forms in Drug and cosmetic act, 1945?

- |               |               |
|---------------|---------------|
| 1) Schedule B | 2) Schedule C |
| 3) Schedule D | 4) Schedule A |

28. Which schedule is related to GMP for ASU drugs?

- |               |               |
|---------------|---------------|
| 1) Schedule A | 2) Schedule T |
| 3) Schedule B | 4) Schedule M |

29. What is the maximum percentage limit of alcohol (Ethyl alcohol v/v) in Mritasanjivani sura?

- |        |        |
|--------|--------|
| 1) 12% | 2) 16% |
| 3) 10% | 4) 18% |

30. What is section 33EE?

- |                     |                    |
|---------------------|--------------------|
| 1) Spurious drug    | 2) Misbranded drug |
| 3) Adulterated drug | 4) Putrid drug     |

31. Which form is given by licensing authority for the certificate of G.M.P. of ASU drugs?

- |              |             |
|--------------|-------------|
| 1) Form 26E1 | 2) Form 26B |
| 3) Form 26C  | 4) Form 24D |

32. What should be called the drug if it is an imitation of another drug according to D&C Act?

- |                    |                     |
|--------------------|---------------------|
| 1) Misbranded drug | 2) Adulterated drug |
| 3) Imitated drug   | 4) Spurious drug    |

33. Misbranded drugs belong to which section of D&C Act?

- |        |        |
|--------|--------|
| 1) 33B | 2) 33E |
| 3) 33A | 4) 33C |

34. What is the shelf life of Churna an Ayurvedic formulation?

- |            |           |
|------------|-----------|
| 1) 2 years | 2) 3Years |
| 3) 5Years  | 4) 1Years |

35. Which Ayurvedic dosage form has no expiry date?

- |                  |          |
|------------------|----------|
| 1) Sweta parpati | 2) Varti |
| 3) Parpati       | 4) Vati  |

36. Which Ayurvedic dosage form became more efficacious with the passage of time?

- |          |              |
|----------|--------------|
| 1) Asava | 2) Guggulu   |
| 3) Taila | 4) Lepa guti |

37. Which Schedule gives information about fees for test or analysis by the central drugs laboratories or state drugs laboratories?

- |               |               |
|---------------|---------------|
| 1) Schedule F | 2) Schedule Y |
| 3) Schedule K | 4) Schedule B |

38. **What is minimum space requirement for Manufacturing ASU drugs?**  
1) 1200 sq. ft. 2) 1600 sq. ft.  
3) 1800 sq. ft. 4) 1300 Sq. ft.
39. **What is minimum space requirement for Manufacturing Asava / Arishta?**  
1) 150 sq. ft. 2) 250 sq. ft.  
3) 200 sq. ft. 4) 100 sq. ft.
40. **What is in the "First Schedule" of Drugs & Cosmetic Act,1940?**  
1) List of books 2) List of Glasswares  
3) List of Equipments 4) List of Forms
41. **What is the duration of renewal license periods for selling drugs?**  
1) 5 Years 2) 3 Years  
3) 4 Years 4) 6 Years
42. **When ayurvedic drug manufacturer have to submit the register of "Record of market complaints" to licensing authority?**  
1) Once a year 2) Once in a six month  
3) Every 3 year 4) Never
43. **Pilocarpine is used for:**  
1) Glaucoma 2) Paralytic ileus  
3) Urinary retention 4) All of these
44. **Atropine does not antagonise the following feature of anticholinesterase poisoning:**  
1) Hypotension 2) Central excitation  
3) Muscle paralysis 4) Bronchoconstriction
45. **The following is a selective  $\alpha_2$  adrenoceptor antagonist:**  
1) Prazosin 2) Yohimbine  
3) Phentolamine 4) Clonidine
46. **Propranolol can be used to allay anxiety associated with:**  
1) Chronic neurotic disorder 2) Schizophrenia  
3) Short-term stressful situations 4) Endogenous depression
47. **Select the  $\beta$ -adrenergic blocker that has additional  $\alpha$  blocking, vasodilator and antioxidant properties:**  
1) Carvedilol 2) Celiprolol  
3) Acebutolol 4) Metoprolol
48. **Sulphur is used in the treatment of\_\_\_\_\_.**  
1) Diabetes 2) Inflammation  
3) Tuberculosis 4) Scabies
49. **Vaniline sulphuric acid is used to detect \_\_\_\_\_.**  
1) Alkaloids 2) Tannins  
3) Volatile oil components 4) Saponins
50. **Which one is not a destructive technique in T.L.C.?**  
1) Anisaldehyde sulphuric acid spray 2) Ferric chloride spray  
3) Iodine chamber 4) Ninhydrin spray

51. **Which one is not detected by dragondroff reagent?**  
1) Vasicine  
2) Reserpine  
3) Piperine  
4) Catechin
52. **H1 antihistaminics are beneficial in:**  
1) All types of allergic disorders  
2) Certain type I allergic reactions only  
3) Certain type IV allergic reactions only  
4) Bronchial asthma
53. **Bromhexine acts by:**  
1) Inhibiting cough centre  
2) Irritating gastric mucosa and reflexly increasing bronchial secretion  
3) Depolymerizing mucopolysaccharides present in sputum.  
4) Desensitizing stretch receptors in the lungs
54. **Antitussives act by:**  
1) Liquifying bronchial secretions  
2) Raising the threshold of cough centre  
3) Reducing cough inducing impulses from the lungs  
4) Raising the threshold of cough centre and Reducing cough inducing impulses from the lungs
55. **Basal thermometer is used for....**  
1) Temperature determination  
2) Estimation of time of ovulation  
3) Consistency of pharma products  
4) Stability
56. **Octreotide is a long acting synthetic analogue of:**  
1) Prolactin  
2) Growth hormone  
3) Somatostatin  
4) Gonadotropin releasing hormone
57. **The drug is placed under the tongue and allow to dissolve, this process is called as,**  
1) Parental administration  
2) Oral administration  
3) Sublingual administration  
4) Intra dermal administration
58. **Out of the following drug which drug is chemically glycoside?**  
1) Diltazim  
2) Nifedipine  
3) Digoxin  
4) Aspirin
59. **The primary indication of tamoxiphen citrate is:**  
1) Female infertility  
2) Endometrial carcinoma  
3) Breast Carcinoma  
4) Endometriosis
60. **Streptomycin is effective against....**  
1) Gram +ve bacteria only  
2) Gram -ve bacteria only  
3) Gram +ve bacteria and Gram -ve bacteria  
4) Effective against virus
61. **Azithromycin is mainly eliminated by route....**  
1) Renal  
2) Hepatic  
3) Perspiration  
4) Semen

62. **What is the nature of Heparin?**  
 1) Acidic  
 2) Basic  
 3) Amphoteric  
 4) None of these
63. **HLB system was developed by**  
 1) Griffin  
 2) Stock's  
 3) Dalla Valle  
 4) None of these
64. **To identify the emulsion type, which of the following tests are conducted?**  
 1) Dilution test  
 2) Dye test  
 3) Conductivity test  
 4) All of these
65. **The stability of suspensions can be evaluated by**  
 1) Sedimentation volume  
 2) Degree of flocculation  
 3) Re-dispersibility  
 4) All of these
66. **Which of the following is not used as a emulsifying agent?**  
 1) Surfactant  
 2) Hydrophilic colloids  
 3) Electrolytes  
 4) Finely divided solids
67. **Which of the following agents are used as flavoring agents**  
 1) Menthol  
 2) Cinnamon  
 3) Both Menthol and Cinnamon  
 4) None of these
68. **In the formulation, to facilitate the wetting of insoluble solids, which of the following agents used**  
 1) Suspending agents  
 2) Flavoring agents  
 3) Wetting agents  
 4) None of these
69. **To increase the viscosity of liquid, which of the following agents are used**  
 1) PVP  
 2) Methyl Cellulose  
 3) Sodium Carboxy Methyl Cellulose  
 4) All of these
70. **How surfactants will facilitate or aid wetting of hydrophobic materials in liquid**  
 1) By decreasing the solid-liquid interfacial tension  
 2) By increasing the solid-liquid interfacial tension  
 3) By decreasing the solid-liquid interfacial tension and By increasing the solid-liquid interfacial tension  
 4) None of these
71. **Which of the following is a synthetic sweetener**  
 1) Glucose  
 2) Sucrose  
 3) Sorbitol  
 4) Aspartame
72. **Generally pastes contain**  
 1) High percentage of insoluble solids  
 2) Low percentage of insoluble solids  
 3) Both High and Low percentage of insoluble solids  
 4) None of these

73. Which of the following is not a film defect in tablet coating

- |                |             |
|----------------|-------------|
| 1) Blistering  | 2) Flaking  |
| 3) Orange peel | 4) Mottling |

74. Which of the following method is used to determine flow property of powders

- |                    |                  |
|--------------------|------------------|
| 1) Angle of repose | 2) Sedimentation |
| 3) Deflocculation  | 4) None of these |

75. Pyrogens are generally

- |                              |                              |
|------------------------------|------------------------------|
| 1) Induce joint pain         | 2) Decrease body temperature |
| 3) Increase body temperature | 4) None of these             |

76. Which of the following method is not used in evaluation of tablet

- |                    |                     |
|--------------------|---------------------|
| 1) Angle of repose | 2) Disintegration   |
| 3) Dissolution     | 4) Weight variation |

77. In the preparation of vanishing creams, which types of bases are used generally?

- |                      |                          |
|----------------------|--------------------------|
| 1) Absorption bases  | 2) Water removable bases |
| 3) Hydrocarbon bases | 4) None of these         |

78. Which of the following substances liberate water of crystallization

- |                 |                      |
|-----------------|----------------------|
| 1) Hygroscopic  | 2) Efflorescent      |
| 3) Deliquescent | 4) Eutectic mixtures |

79. Which of the following substances is not used as binding agent

- |         |         |
|---------|---------|
| 1) CMC  | 2) PVP  |
| 3) Talc | 4) Gums |

80. Phase inversion in emulsion involves

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1) Change of emulsion type | 2) Complete separation of two phases |
| 3) Formation of aggregates | 4) Upward movements of floccules     |

81. Which of the following is not a semisolid dosage form

- |              |               |
|--------------|---------------|
| 1) Paste     | 2) Creams     |
| 3) Ointments | 4) Suspension |

82. Which of the following substances is used to prevent oxidation reaction

- |                  |                          |
|------------------|--------------------------|
| 1) Preservatives | 2) Antioxidants          |
| 3) Surfactants   | 4) Deflocculating agents |

83. The temperature condition for storage of drug products under cold temperature is given as :

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| 1) Temperature between 8°C and 25°C | 2) Temperature below 2°C           |
| 3) Temperature at 0°C               | 4) Temperature between 2°C and 8°C |



84. "Qualitative results" refer to:

- 1) Results that can be observed during an experiment.
- 2) Results those are difficult to observe during an experiment.
- 3) Results that require numerical data.
- 4) None of these

85. Which type of orbital looks like a figure-8 when drawn?

- 1) s-orbital
- 2) p-orbital
- 3) d-orbital
- 4) f-orbital

86. Which of the following typically has a low melting point?

- 1) metals
- 2) nonmetals
- 3) metalloids
- 4) transition metals

87. Cations have:

- 1) Positive charge
- 2) Negative charge
- 3) No charge
- 4) It is impossible to predict the charge on a cation

88. The chemical name for  $\text{Fe}_2\text{O}_3$  is:

- 1) iron oxide
- 2) iron (II) oxide
- 3) iron (III) oxide
- 4) iron (VI) oxide

89. The symbol (s) after a chemical compound lets you know that it is:

- 1) soluble in water
- 2) insoluble in water
- 3) a solid
- 4) More than one of these

90. Which of the following is not an acid?

- 1)  $\text{HNO}_3$
- 2)  $\text{CH}_3\text{COOH}$
- 3)  $\text{H}_2\text{SO}_4$
- 4)  $\text{NaOH}$

91. Which of the following is NOT a laboratory safety rule?

- 1) You should never mix acids with bases
- 2) You should tie back your long hair
- 3) You should never add water to acid
- 4) All of the these are valid safety rules

92. An example of a chemical property is:

- 1) density
- 2) mass
- 3) acidity
- 4) solubility

93. Bohr's model of the atom was able to accurately explain:

- 1) Why spectral lines appear when atoms are heated.
- 2) The energies of the spectral lines for each element.
- 3) Why electrons travel in circular orbits around the nucleus.
- 4) None of these

94. Role of Buffer solution in case of pH.

- 1) Change pH
- 2) Increase pH
- 3) Maintain pH
- 4) Decrease pH

95. What is meant by Anhydrous salt?

- 1) With water
- 2) Without water
- 3) Small amount of water
- 4) with ammonia

96. What indicator is suitable for Sodium Carbonate titration against strong acids and why?

- 1) Methyl red
- 2) Methyl orange
- 3) Phenolphthalein
- 4) Gelatin solution

97. Which one is not the type of Refractometer?

- 1) Pulfrich type
- 2) Dipping type
- 3) Abbes's type
- 4) Brookfield type

98. Which one is not the type of heavy metal?

- 1) As (Arsenic)
- 2) Hg (Mercury)
- 3) Fe (Iron)
- 4) Pb (Lead)

99. What do you mean by Mohr's Salt?

- 1)  $(\text{NH}_4)_2\text{Fe}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$
- 2)  $\text{CaCO}_3$
- 3)  $\text{FeSO}_3 (\text{NH}_4)_2\text{SO}_4 \cdot \text{H}_2\text{O}$
- 4)  $\text{FeSO}_4 (\text{NH}_4)_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$

100. The equivalent weight of  $\text{KMnO}_4$

- 1) 35.1
- 2) 31.6
- 3) 39.5
- 4) 31.00