

PARUL UNIVERSITY
FACULTY OF PHARMACY
B. Pharm. Summer 2018-19 Examination

Semester: 1
Subject Code: BP104T
Subject Name: Pharmaceutical Inorganic Chemistry

Date: 24/04/2019
Time: 02:00 pm to 05:00 pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)**(20)**

1. When unstable nuclei undergo radioactive decay. They emit three types of radiation. which is not one of them?

a) alpha	b) beta
c) delta	d) gamma
2. Sodium iodide I ¹³¹ is used to treat

a) Hypernatremia	b) Hypertension
c) Hyperkalemia	d) Hyperthyroidism
3. Dil. HCl is used as....

a) Antiseptic	b) Protective
c) Acidifying agent	d) Antioxidant
4. In Bronsted-Lowry concept acid is

a) Proton donor	b) Proton acceptor
c) Electron donor	d) Electron acceptor
5. Sodium Bicarbonate is.....

a) Cathartics	b) Antacid
c) antimicrobial	d) Antidote
6. To prevent dental caries toothpaste containing should be used

a) Potash Alum	b) Sodium fluoride
c) Sodium potassium tartrate	d) Iodine
7. The standard and test solution used for limit test are prepared in

a) Beaker	b) Burette
c) Nessler cylinder	d) Volumetric flask
8. Antacids are used for treating indigestion which contain

a) Potassium hydroxide	b) Sodium hydroxide
c) Magnesium carbonate	d) Magnesium hydroxide
9. Zinc eugenol cement is

a) Dental products	b) Acidifiers
c) Haematinics	d) Use in diabetes
10. What is true about antacid?

a) It is alkaline substance	b) Used for inhibiting release of acid
c) It is water soluble	d) All of above
11. An **alpha particle** is a fast moving packet containing

a) two protons and two neutrons	b) one protons and two neutrons
c) two electron	d) None of above
12. Which one Astringents _____

a) Potash Alum	b) a and c both
c) Zinc Sulphate	d) Copper sulphate
13. Which of the following is called Rochelle salt?

a) Potassium citrate	b) Potassium bitartrate
c) Sodium potassium tartarate	d) All of above
14. Following all are Cathartics except _____

a) Magnesium sulphate	b) Sodium orthophosphate
c) Kaolin and Bentonite	d) Hydrogen peroxide

15. Which stains paper is used in limit test of Arsenic?
 a) Cobalt chloride
 b) pH paper
 c) Mercuric chloride paper
 d) None of above
16. Which one is Haematinics?
 a) Ferrous sulphate
 b) a and c both
 c) Ferrous gluconate
 d) None of above
17. _____ are the agents which prevent or arrest vomiting?
 a) Preservatives
 b) Antacids
 c) Antiemetic
 d) Antidotes
18. Curie is defined as the amount of radioactive substance which give rise to a decay rate of _____ decay per second.
 a) 3.7×10^9 per second
 b) 3.7×10^7 per second
 c) 3.7×10^{10} per second
 d) 3.7×10^{11} per second
19. Half life _____
 a) $\lambda = 0.693 / t_{1/2}$
 b) $\lambda = 6.93 / t_{1/2}$
 c) $\lambda = 0.0693 / t_{1/2}$
 d) $\lambda = 0.00693 / t_{1/2}$
20. Impurities in pharmaceutical preparation may be due to following sources:
 a) Chemical instability
 b) Raw material
 c) Manufacturing process
 d) All of the above

Q.2 Long Answers (any 2 out of 3) (10 Mark Each)

(20)

1. Define limit test and explain limit test of Iron. Discuss the sources of impurities in Pharmaceuticals.
2. Define Radioactivity. Describe properties of α , β , γ radiations.
3. Define and classify the Gastrointestinal agents. Write Ideal properties of antacids.

Q.3 Short Answers (any 7 out of 9) (5 Mark Each)

(35)

1. Define: 1. Half life 2. Cathartics 3. Haematinics 4. Astringents 5. Buffer capacity
2. Write a short note on role of Sodium fluoride in the treatment of dental caries.
3. Explain physiological acid base balance.
4. Describes buffered isotonic solutions, and measurements of tonicity in brief.
5. Write a short note on an Oral Rehydration Salt.
6. Write a short note on Expectorants and Emetics.
7. Give a brief note on Poison and Antidote.
8. Write pharmaceutical application of radioactive substances.
9. Write assay of Calcium gluconate.