

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE - RAIGAD - 402 103
Winter Semester Examination, December - 2017**

Branch: B.Pharm.

Semester: I

Subject with Subject Code: Pharmaceutical Inorganic Chemistry
[BP104T]

Marks: 75

Date: 26 / 12 / 2017

Time: 3 Hrs.

Instructions:

- I. All questions are compulsory
- II. Illustrate your answers with neat sketches, diagram etc., wherever necessary.

Q.No.1 Multiple Choice Questions.

(20)

1. Ammonium chloride can be used as
a) Acidifier b) Expectorant c) Both acidifier & Expectorant d) Emetic
2. Disinfectant which are used to maintain general public health are called as
a) Germicide b) Antiseptic c) Sanitizers d) Bacteriostatic
3. What should not be the ideal property for an antacid preparation?
(i) Should be slow & short acting (ii) Should not cause systemic alkalosis
(iii) Should buffer in the pH range 4-6 (iv) Should evolve gases
a) Only i b) ii & iii c) i & iv d) Only iii
4. What is incorrect about sodium bicarbonate
a) It is systemic antacid b) It also called as baking soda
c) It produce effervescence with acid d) It does not absorb systemically
5. Fluoride inhibits caries formation via
(a) Decrease acid solubility of enamel (b) bacterial inhibition
(c) Both a & b (d) Increase acid solubility of enamel
6. Which of the following emetic is prepared by reaction of sodium bicarbonate with cream of tartar
a) Rochelle salt b) Cupric sulphate c) Epsom salt d) None of the above
7. Which of the following antidote is act by adsorption
a) Sodium thiosulphate b) Activated charcoal c) Sodium nitrite d) None of the above
8. Epsom salt is chemically
a) Ferrous sulphate b) Magnesium sulphate c) Ferrous gluconate d) Copper sulphate
9. Which of the following is obtained from weathering volcanic ash
a) Kaolin b) Bentonite c) Aluminium hydroxide d) Sodium orthophosphate

10. Identify the properties of potash alum
- i) Colorless crystal or powder, with slightly sweet taste
 - ii) It act as astringent
 - iii) Soluble in water & insoluble in ethanol
 - iv) It gives positive tests for potassium, aluminium & sulphate
- a) i, ii, & iv b) i, iii & iv c) ii, iii & iv d) all of the above

- 11) Indian Pharmacopoeia is published by _____
- a) Ministry of Health & Family Welfare
 - b) Food & Drug Administration
 - c) World Health Organization
 - d) Ministry of Science & Technology

- 12) Citric acid is used in limit test of iron to prevent
- a) Precipitation of iron by ammonia
 - b) Oxidation of iron
 - c) Precipitation of iron by thioglycollic acid
 - d) Complexation with thioglycollic acid

- 13) Barium sulphate reagent contains
- a) Barium chloride, sulphate free alcohol & sodium sulphate
 - b) Barium chloride, sulphate free alcohol & Potassium sulphate
 - c) Barium chloride, sulphate free alcohol, HCl & sodium sulphate
 - d) Barium chloride, sulphate free alcohol, H₂SO₄ & sodium sulphate

- 12) Limit test of heavy metal is based on reaction between
- a) Metallic impurities & hydrogen sulphide
 - b) Metallic impurity & Hydrogen sulphate
 - b) Metallic impurities & acetic acid
 - d) Metallic impurities & ammonia

- 15) Zinc oxide with eugenol is used in dental product as
- a) Dentifrices
 - b) Medicated cement & fillers
 - c) Polishing agent
 - d) Anticaries agent

- 16) Lead acetate cotton plug is used in limit test of arsenic for
- a) Traps hydrogen sulphide
 - b) Traps thiosulphate
 - c) Traps hydrogen sulphate
 - d) Traps arsine gas

- 17) Choose the correct composition of ORS
- (a) NaCl
 - (b) KCl
 - (c) Sodium citrate
 - (d) sodium bicarbonate
 - (e) glucose
- (i) a, b, c, d ii) a, b, d, e iii) a, b, c, e iv) b, c, d, e

- 18) Measurement of radioactivity is termed as
- (a) Radiation
 - (b) Radiation dosimetry
 - (c) Both (a) and (b)
 - (d) None of the above

- 19) In which year the first Indian Pharmacopoeia was published by Indian Pharmacopoeia Committee?
- a) 1948
 - b) 1960
 - c) 1955
 - d) 1966

20) Gamma rays are electromagnetic radiations with a wave length

- (a) Much larger than those of light
(c) Equal to light

- (b) Much shorter than those of light
(d) None of the above

Q.No. 2 Attempt any TWO of the following:

(20)

- A) Define & classify antimicrobials. State the mechanism by which they act. Write any one methods of preparation & assay of hydrogen peroxide.
B) Enlist sources of impurities. Draw a neat labeled diagram of Gutzeit Apparatus. Explain the principle of arsenic limit test.
C) Define & classify antacids. Enlist its ideal properties & explain aluminium hydroxide gel in short.

Q.No. 3 Attempt any SEVEN of the following:

(35)

- A) Explain how buffer systems maintains physiological acid base balance.
B) What are dentifrices? Explain Role of fluoride in the treatment of dental caries.
C) Define antidote. Explain in short about sodium thiosulphate.
D) Write the principle and reaction involved in limit test of iron.
E) Write in short about acidifier with example.
F) Define buffers. Write a note on buffer capacity.
G) What are emetics? Explain copper sulphate with respect to properties & assay.
H) Write a note on ORS.
I) Enlist properties of α , β & γ particles. Write applications of radioisotopes.

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