

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**D. Pharm., May-2018 Examination**

Year : 1

Subject Code: 08600102

Subject Name: Pharmaceutical chemistry-I

Date: 16-05-2018

Time: 10:00AM to 01:00PM

Total Marks: 80

**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. Milk of magnesia is a synonym of:  
a) Magnesium oxide  
b) Magnesium sulphate  
c) Calcium hydroxide  
d) Magnesium hydroxide
2. Antimicrobial agents act by  
a) Oxidation  
b) Halogenations  
c) Protein precipitation  
d) All of the above
3. Zinc Sulphate is used as:  
a) Astringent  
b) Adsorbent  
c) Preservatives  
d) Antidote
4. The best example of anticaries agent is:  
a) Calcium carbonate  
b) Sodium fluoride  
c) Hydrogen peroxide  
d) Zinc chloride
5. Epsom salt is synonym used for:  
a) Magnesium sulphate  
b) Magnesium oxide  
c) Calcium carbonate  
d) Boric acid
6. Which category of drug is used to stop bleeding from small cuts?  
a) Antidote  
b) Haematinics  
c) Cathartic  
d) Astringent
7. Chemical formula of Sodium Nitrite is:  
a) NaOH  
b) NaNO<sub>2</sub>  
c) Na<sub>2</sub>CO<sub>3</sub>  
d) NaNO<sub>3</sub>
8. Borax is used as:  
a) Antifungal  
b) Antidiarrhoeal  
c) Antibacterial  
d) None of the above
9. Barium sulphate is used as:  
a) X-ray detector  
b) Diagnostic acid  
c) Electrolyte replemisher  
d) All of the above
10. Which is the main constituent of face powder:  
a) Zinc stearate  
b) Zinc oxide  
c) Talc  
d) Lime stone
11. Arsenic limit test is based on  
a) Turbidity  
b) Opalescence  
c) Colour  
d) None of the above
12. Which inorganic salt is used as Expectorant?  
a) KI  
b) KCl  
c) Sodium iodide  
d) None of the above
13. Sodium metabisulphite is used as:  
a) Anti-oxidant  
b) Astringent  
c) Antidiarrhoeal  
d) Cathartic
14. Sodium chloride in ORS is used as:  
a) Electrolyte  
b) Isotonic agent  
c) Buffering agent  
d) None of the above

15. Medriel salt is:
- |                     |                         |
|---------------------|-------------------------|
| a) Sodium sulphate  | b) Sodium salicylate    |
| c) Sodium phosphate | d) Sodium metaphosphate |
16. Sodium lactate is used as:
- |                      |                            |
|----------------------|----------------------------|
| a) Sodium supplement | b) Electrolyte replimisher |
| c) Astringent        | d) Expectorant             |
17. All of the following are Antimicrobial agents EXCEPT:
- |                      |                           |
|----------------------|---------------------------|
| a) Hydrogen peroxide | b) Potassium permanganate |
| c) Povidone-iodine   | d) Talc                   |
18. Zinc sulphate is also known as:
- |                 |                  |
|-----------------|------------------|
| a) Black vitrol | b) Yellow vitrol |
| c) White vitrol | d) Pink vitrol   |
19. Nitrous oxide having the molecular formula:
- |             |             |
|-------------|-------------|
| a) $N_2O_2$ | b) $N_2O$   |
| c) $N_3O$   | d) $N_2O_3$ |
20. All of the following are Non-Systemic antacids EXCEPT:
- |                        |                              |
|------------------------|------------------------------|
| a) Sodium bicarbonate  | b) Magnesium trisilicate     |
| c) Magnesium carbonate | d) Basic aluminium compounds |

**Q.2 Long Answers (any 8 out of 10) (05 Mark Each)**

**(40)**

1. Define the term "limit test". Explain limit test for chloride.
2. Write the mechanism of action of antimicrobial agents with suitable example.
3. Describe antacids, give requirements of an ideal antacid and classify them with suitable examples.
4. Describe various sources of impurities in pharmaceutical substance.
5. Define & classify Expectorants. Give a short note about Potassium iodide.
6. Write in a brief about G M counter method.
7. Write a note on limit test for Arsenic.
8. Define Inhalants. Write a short note on Nitrous oxide.
9. Define Antimicrobials. Describe classification of Antimicrobials.
10. Discuss various Biological effects of radiations & Measurement of radio activity.

**Q.3 Short Answers (2 Mark Each) (Answer any 10)**

**(20)**

1. Define these terms: **a)**Radio activity **b)**Astringents
2. Enlist the principle and procedure involved in Limit test of Iron.
3. Classify antidote with suitable example.
4. Enlist the official preparations of sodium chloride.
5. Write a note on Cathartics.
6. Dentifrice with an example.
7. Buffer with an example.
8. Brief note on ferrous sulphate.
9. Write a note on **ORS**.
10. Enlist various tests for Cations & Anions as per IP.
- 11 Define these terms: **a)**Acids **b)**Buffers
- 12 Write in a brief about Combinations of antacid preparations.