



BRAINWARE UNIVERSITY
D. Pharm Part I Examination 2018 - 19
Programme– Diploma in Pharmacy
Course Name – Pharmaceutical Chemistry-I
Course Code – 1.2T

(D. Pharm first year final)

Time allotted: 3 Hours

Full Marks: 80

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Question)

20 x 1 = 20

1. *Choose the correct alternative from the following*
- (i) First I.P published in the year
- | | |
|---------|---------|
| a. 1947 | b. 1955 |
| c. 1950 | d. 1945 |
- (ii) Which one is used as a Haematinic
- | | |
|----------------------|---------------------|
| a. Potassium iodide | b. Ferrous sulphate |
| c. Calcium Gluconate | d. Sodium Citrate |
- (iii) The combination of aluminum and magnesium salts as antacid are used to
- | | |
|---|---|
| a. To increase the activity of each antacid | b. Balance the constipation and laxative effect |
| c. Increase the absorption of each antacid | d. None of these |
- (iv) Limit of Arsenic in drinking water as per I.P is less than
- | | |
|-----------|-----------|
| a. 05 ppm | b. 10 ppm |
| c. 01 ppm | d. 02 ppm |
- (v) Ammonium Chloride is used as
- | | |
|-----------------------|-----------------|
| a. Systemic Acidifier | b. Expectorant |
| c. Diuretic | d. All of above |
- (vi) Which is used as saline cathartic?
- | | |
|----------------------|-----------------------|
| a. NaCl | b. NaHCO ₃ |
| c. MgSO ₄ | d. CaCO ₃ |
- (vii) Muriatic acid is also known as
- | | |
|---------------------|-----------------------------------|
| a. HCl | b. H ₂ SO ₄ |
| c. HNO ₃ | d. None of these |

- (viii) Which is used as an Expectorant?
 a. KI
 b. CuSO_4
 c. KBr
 d. FeSO_4
- (ix) pH range of Urine is
 a. 4-6
 b. 7-10
 c. 6-8
 d. 4.5-8
- (x) Which of the following is essential to regulate acid base balance
 a. Sulphate
 b. Chloride
 c. Sodium
 d. Bicarbonate
- (xi) As per I.P room temperature means
 a. 10 to 15°C
 b. 15 to 20°C
 c. 15 to 30°C
 d. 37°C C
- (xii) pH of 0.1N HCL solution
 a. 0
 b. 1.0
 c. 2.5
 d. 3.2
- (xiii) The International Pharmacopoeia is published by the
 a. MHRA
 b. WHO
 c. CDSCO
 d. USFDA
- (xiv) The synonym of $\text{ZnSO}_4, 7\text{H}_2\text{O}$ is
 a. Blue Vitriol
 b. Mohr's salt
 c. White Vitriol
 d. Green Vitriol
- (xv) Units of Radioactivity
 a. RAD
 b. Curie
 c. Rontgen
 d. All of the above
- (xvi) Measurement of radioactivity is done by
 a. Ionization Chamber
 b. Scintillation counter
 c. G.M Counter
 d. All of the above
- (xvii) Example of radio opaque contrast media is
 a. MgSO_4
 b. Bentonite
 c. BaSO_4
 d. Kaoline
- (xviii) To prevent dental caries the concentration of NaF that is used topically is
 a. 1% solution
 b. 3% solution
 c. 2% solution
 d. 5% solution
- (xix) Thioglycolic acid is used for the limit test of
 a. Lead
 b. Heavy metal
 c. Iron
 d. Lead
- (xx) I^{131} is used in the treatment of
 a. Thyroid
 b. Cancer
 c. Anaemia
 d. CHF

Group – B

(Short Answer Type Questions)

8 x5 = 40

Answer any *eight* from the following

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|--|-----------|
| 2. Why Lead acetate cotton is used in the Limit test of Arsenic? | 5 |
| 3. Write the preparation, properties and use of chlorinated lime. | 2+2+1 |
| 4. Write the preparation, properties and use of chlorinated lime. | 2+2+1 |
| 5. Define with examples : Emetics, Astringents, Antidote, Hematinic and Laxative | 1+1+1+1+1 |
| 6. Define Isotonic, Hypotonic and Hypertonic solution with examples | 1+2+2 |
| 7. What are Anticaries agents? Describe the role of Fluoride as anticaries agents. | 2+3 |
| 8. What is scale preparation of Iron? What is its utility? Write the preparation, properties and use of Ferric ammonium sulphate | 1+1+3 |
| 9. Write a short note on pH, pOH and Buffer solution with example. | 1+2+2 |
| 10. Define Dehydration, Hypovolemia and Edema. Write the composition of ORS as per WHO and I.P. | 3+2 |
| 11. Write a short note on Handerson-Hasselbatch equation for Acidic Buffer solution. | 5 |

Group – C

(Long Answer Type Questions)

2x 10 = 20

Answer any *two* from the following

- | | |
|--|-------------|
| 12. Define Topical Agents. Write a note on categories of Topical Agents. Write the properties and use of Simethicone, Zinc oxide and Titanium dioxide. | 2+2+2+2+2 |
| 13. What are major intra and extra cellular electrolytes? Give the important function served by chloride and bicarbonate ion. Describe electrolyte combination therapy. Write the method of preparation, properties and use of Potassium chloride. | 1+2+3+4 |
| 14. Define Purgative and Cathartics. Write the mechanism of action of cathartics. Write the preparation, properties and use of Magnesium oxide, Magnesium sulphate and Sodium potassium tartrate. | 1+1+2+2+2+2 |
