[Total No. of Questions - 16] [Total No. of Printed Pages - 3] (2124)

### 1674

# B. Pharmacy 1st Semester Examination Inorganic Phar. Chemistry (OS) HBP-109

Time: 3 Hours

Max. Marks: 80

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note: Each section having (16) sixteen marks. Attempt any one question from section A, B, C and D. Section E is compulsory.

### SECTION - A

 Explain the three concepts of Acid and Base giving suitable examples. (16)

OR

2. Define physiological buffer and explain the mechanism of maintaining ph of blood. (16)

## SECTION - B

3. Write note on essential and trace elements. (16)

OR

 How are the properties of antacids evaluated? Describe the preparation and uses of Aluminium Hydroxide gel as antacid. (16)

## SECTION - C

5. Give the types of Antimicrobial agents with example and explain their mechanism of actions. (16)

[P.T.O.]

## OR

6. Define the term - dentifrices and anticaries agent and give preparation, uses and properties of Sodium fluoride & dibasic calcium phosphate. (16)

### SECTION - D

 Write exhaustive note on - measurement of Radioactivity & Application of radioisotopes.

## OR

Discuss the preparation, properties and uses of NaNO<sub>2</sub> & N<sub>2</sub> and define desiccant with example. (16)

## SECTION - E

- 9. Which one is not an antacid combination?
  - (a) Aluminium Hydroxide & Magnesium carbonate.
  - (b) Aluminium Hydroxide & Magnesium trisilicate.
  - (c) Aluminium Hydroxide & Magnesium Hydroxide.
  - (d) Calcium carbonate & Sodium Fluoride.
- 10. Hydrogen peroxide is used as-
  - (a) Antioxidant (b) Oxidizing agent (c) Reducing agent
  - (d) a & c.
- 11. Chemical formula of Borax is-
  - (a)  $\mathrm{Na_2B_4O_7.10H_2O}$  (b)  $\mathrm{Na_2CO_3}$  (c)  $\mathrm{Na_2SO_4}$  (d)  $\mathrm{Na_2B_3O_5}$
- 12. Aromatic spirit of Ammonia is an example of-
  - (a) Expectorant (b) Respiratory stimulant (c) Antacid
  - (d) Astringent.

- 13. Which is the example of Hematinic?
  - (a) Ferrous Gluconate (b) Ferrous Fumerate (c) Ferrous sulphate (d) All
- 14. Which is not the unit of Radioactivity?
  - (a) Roentgen (b) RAD (c) REM (d) Calory.
- 5. Measurement of Radioactivity can be done by
  - (a) Geiger-Muller counter (b) Ionisation chamber
  - (c) Autoradiography (d) All
- 16. Which gas is used to protect chemicals, Reagents and Pharmaceuticals from oxidation?
  - (a)  $O_2$  (b)  $H_2$  (c)  $N_2$  (d)  $O_3$ .

 $(8 \times 2 = 16)$