

20111

21222

**3 Hours / 80 Marks**

Seat No. 

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15 minutes extra for each hour

- Instructions* – (1) All Questions are *Compulsory*.
- (2) Answer each next main Question on a new page.
- (3) Illustrate your answers with neat sketches wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

- 1. Answer any SIX of the following:** **30**
- a) Define capsules with its advantages and disadvantages. Differentiate between hard and soft gelatin capsules.
- b) Explain principle, construction, working of Hammer mill and applications with a neat labelled diagram.
- c) Define emulsion. Describe the manufacturing, packaging, labelling and storage of dry powder for reconstitution.
- d) Define tablet. Explain the different steps in film coating of tablets.
- e) Define eye drops. Explain various excipients used in eye drops.
- f) Define sera. Describe the preparation, storage use and dose of Typhoid vaccine.
- g) Define pharmacopoeia. Name the various editions of I.P. published with the year and their publications. Write any four salient features and 5th edition of I.P.

P.T.O.

**2. Answer any TEN of the following:****30**

- a) What are the ideal requirements of eye ointments.
- b) Explain classification of powders according to I.P.
- c) Write advantages and disadvantages of glass as a packaging material.
- d) Explain the concepts of Quality assurance and Quality control in Pharma Industry.
- e) Define Injectables. Write classifications / types of injectables.
- f) Define capsule. Explain processing of hard gelatin capsule.
- g) Define N.D.D.S. Classify with examples.
- h) Describe advantages and challenges in N.D.D.S.
- i) Differentiate between creams and pastes.
- j) Define coating of tablet. Describe the method of coating.
- k) Explain concept of calibration and validation.

**3. Answer ALL Questions of the following:****20**

- a) Calamine lotion is used as a \_\_\_\_\_.
- b) Define Container.
- c) Why water is used as commonly vehicle?
- d) Define extended-release tablet.
- e) Define elixir.
- f) The 8<sup>th</sup> edition of I.P. was published in the year \_\_\_\_\_.
- g) Define quality control.
- h) Define Drying.
- i) Define extraction.
- j) Define size reduction.
- k) Who organizes the Indian Pharmaceutical Congress every year?
  - i) Indian Pharmaceutical Congress
  - ii) Indian Pharmaceutical Congress Association
  - iii) Indian Pharmacy Graduates Association
  - iv) Indian Pharmaceutical Association

- l) Who is known as the “Father of Pharmacy Education in India”?
- i) Acharya RC Ray
  - ii) Porf. Mahadev Lal Shroff
  - iii) Sushruta
  - iv) Charaka
- m) The word ‘Pharmacy’ is derived from the Greek word
- i) Pharmaces
  - ii) Pharma
  - iii) Pharmacisto
  - iv) Pharmakon
- n) Most simple and most frequently used method for size separation is \_\_\_\_\_.
- i) Sieve shaker
  - ii) Cyclone separator
  - iii) Air separator
  - iv) Elutriation
- o) Ball mill work on the principal of
- i) Impact
  - ii) Attrition
  - iii) Crushing
  - iv) Impact and attrition
- p) Simple syrup is a saturated solution of \_\_\_\_\_.
- i) Sucrose
  - ii) Fructose
  - iii) Dextrose
  - iv) None of these
- q) The first edition of I.P was published in \_\_\_\_\_.
- i) 1965
  - ii) 1975
  - iii) 1955
  - iv) 1985

- r) Who is the father of medicine?
    - i) Ebers
    - ii) Hippocrates
    - iii) Egyption
    - iv) Pontus
  - s) The efficiency of a ball mill is maximum at
    - i) Low speed
    - ii) High speed
    - iii) Very speed
    - iv) 2/3<sup>rd</sup> speed
  - t) What is USP?
    - i) The United States Pharmacology
    - ii) The United States Pharmacy
    - iii) The United States Pharmacopoeia
    - iv) The United States Pharmaceuticals
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