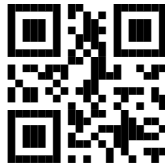


22223

3 Hours / 80 Marks



20111

Seat No.

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- Instructions* –
- (1) All Questions are Compulsory.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
 - (5) In case student has attempted sub-question of Que. No. 3 more than once, only first attempt should be considered for assessment.

Marks
30

1. Attempt any SIX of the following:

- a) Write short note on history of pharmacy profession related to pharmacy education and pharmacy practice in India.
- b) Explain the principle, construction and working of cyclone separator with neat labeled diagram.
- c) Enumerate the various tests for quality control of tablets. Describe the disintegration or friability test.
- d) Define capsule. Describe the process of involved in manufacturing of hard gelatin capsule.
- e) Write short note on:
 - i) Elixirs
 - ii) Suspensions.
- f) Write the formulation parameters for parental in detail.
- g) What are toxoids? Discuss the general method for preparation toxoids.

2. Attempt any TEN of the following:

30

- a) Write advantages and disadvantages of plastics as a packaging material.
- b) Give classification of powders as per I.P.
- c) Write down the advantage and disadvantage of tablets.
- d) Differentiate between lotions and liniments.
- e) Enlist the various bases used for formulation of ointments.
- f) Classify the method of preparation of effervescent granules.
- g) Write any six characteristics of ophthalmic formulation.
- h) Define the term calibration and validation in brief.
- i) Define cGMP and explain its importance.
- j) Define drug delivery system. Classify various drug delivery systems.
- k) What are the future applications of NDDS ?

**3. Attempt the following:**

- a) Who is known as father of pharmacy profession in India ?
- b) Pharmacopoeia contains of
- i) Monograph of drug and substance
 - ii) Standard test
 - iii) Description formulae
 - iv) All of the above
- c) The first edition of pharmacopoeia was published in ____.
- d) Name materials used to prepare pharmaceutical containers
- e) ____ glass is glass of highest pharmaceutical grade.
- f) Saccharin is used as a ____ ____ agent.
- g) Name two antimicrobial preservatives.
- h) To increase viscosity of liquid which of following agents are used.
- i) PVP
 - ii) Sodium Carboxy Methyl Cellulose
 - iii) Methyl Cellulose
 - iv) All of above
- i) Define sieve number.
- j) Which type of mixture are easily formed
- i) Positive
 - ii) Neutral
 - iii) Negative
 - iv) Ampholytic
- k) Write the name of one equation which describes theory of filtration.
- l) Define maceration.
- m) Which of the following is not used as diluent?
- i) Lactose
 - ii) Microcrystalline cellulose
 - iii) Calcium Carbonate
 - iv) Poly Vinyl Pyrolidon
- n) Which type of coating is done to disintegrate tablet in intestine ____.
- o) HLB value of SLS is
- i) 10
 - ii) 12
 - iii) 40
 - iv) None of above
- p) Define suppository is not vegetable oil ?
- q) Write at least two differences between pastes and ointments.
- r) Name two vehicles used in the formulation of ear drops.
- s) Nasal drops should be isotonic with ____% sodium chloride.
- t) Name vaccine used for prevention of tuberculosis.
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