Q.P. Code:09605

[Time: 2.30 Hours] [ Marks:60]

Please check whether you have got the right question paper.

N.B: 1. All Questions are compulsory.
     2. Use of log tables or Non-programmable calculator is allowed.

Q.1 a) Attempt any two of the following 08
   i) Explain the following terms
      a) Misbranded drug b) adulterated drug
   ii) ‘Quality control is a very important section of pharmaceutical industry ‘ - justify the
       statement
   iii) How are impurities introduced in drugs during storage ?
   iv) Discuss the parenteral route of drug administration in detail.

b) Explain dosage form of drugs. Compare between solid and liquid dosage forms
   OR
   b) Describe the methods that are generally used for testing the quality of finished product.
      04

Q.2 a) Attempt any two of the following 08
   i) Explain the dissolution test performed on pharmaceutical product, with special
      reference to significance of it.
   ii) State and explain different factors causing the deterioration of drugs.
   iii) What is bio-availability? Discuss pharmacokinetic parameters used to determine it.
   iv) What are limit tests? Give limit test for chloride

   b) Elaborate the different methods of proximate analysis
      OR
      b) Explain tube dilution method for antimicrobial testing of pharmaceutical product
      04

Q.3 a) Attempt any two of the following 08
   i) Describe the test for detecting the presence of blood in a forensic sample.
   ii) How are the pesticides determined in post-mortem sample?
   iii) Explain the method for estimation of barbiturates in biological fluids.
   iv) Describe the term Analytical Toxicology. Give the significance of it in forensics.

b) What are narcotics? Give the laboratory method for determination of it in body fluids.
   OR
   b) How are traces of drug metabolites detected in blood and urine sample of addicts?
      04

Q.4 a) Attempt any two of the following 08
   i) List the components of hair tonic . Describe a method for the determination of
      pyrogallol in hair tonic.
   ii) Describe the method of estimation of boric acid in face powder
   iii) Explain the process for estimation of non-volatile matter in creams and lotions
      using IR spectroscopy
   iv) What are cosmetics? Give various functions of it.

b) Give the composition of deodorants. Describe the estimation of aluminum from it.
   OR
   b) How will you determine acetone soluble components in lipstick?
      04
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Q.5 Attempt any four of the following

i) Explain the terms 1) therapeutic dose 2) prophylactic dose with suitable example.

ii) Write a note on excipients in pharmaceutical formulations

iii) How is UV spectroscopy used in the analysis of drug?

iv) What is stability of the drug? Explain the importance of study of it.

v) Describe the method for detection of cyanide in postmortem sample

vi) Explain the analytical method of identification and detection of benzodiazepines in forensic sample

vii) How is Titanium in face powder estimated?

viii) Distinguish between Deodorants and anti perspirants

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