Day   : Monday   Time : 2.00 P.M. To 5.00 P.M
Date : 03-07-2017   Max. Marks : 70

N.B.:

1) Q.No.1 and Q.No.5 are **COMPULSORY**. Out of the remaining attempt **ANY TWO** questions from each section.
2) Answers to both the sections should be written in **SEPARATE** answer books.
3) Draw neat labeled diagram **WHEREVER** necessary.
4) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 **A)** Attempt **ANY FOUR** of the following: [08]
  i)   Mention classic sign and symptoms of migraine.
  ii) Differentiate between Ischemic and hemorrhagic stroke.
  iii) Classify hepatitis.
  iv) What are the adverse effects of opioid analgesics?
  v)   What are the side effects of Benzodiazepines?
  vi) Name the four drug regimen used in H. *Pylori* treatment.

  B) Provide a treatment algorithm for Inflammatory Bowel Disease (IBD).   [03]

Q.2 Describe the pathophysiology, clinical manifestations and pharmacotherapy of [12] viral hepatitis including jaundice.

Q.3 **a)** Discuss about etiopathogenesis, treatment objective and pharmacotherapy of [07] Iron Deficiency Anemia.
  b) Define and classify stroke and its management.   [05]

Q.4 Write short notes on **ANY THREE** of the following: [12]
  a) Drug induced hemolytic anemia
  b) Therapeutic drug monitoring of Antiepileptics
  c) Drug induced cholestasis jaundice
  d) NSAIDS in pain management

SECTION – II

Q.5 **A)** Attempt **ANY FOUR** of the following: [08]
  i)   Define Ascitis.
  ii) Mention in brief the pharmacological management of GERD.
  iii) Enlist the adverse effects of antipsychotics.
  iv) What is the role of mecobalamin in megaloblastic anaemia? Mention few sources of folic acid.
  v)   What do you understand by Tension type headache?
  vi) What do you understand by Bipolar disorder?

  B) Provide a treatment algorithm for the H.*Pylori* infection.   [03]

Q.6 Define and classify seizures, their characteristics and drugs employed in [12] management.

Q.7 **a)** Discuss the pathogenesis and treatment of alcoholic liver disease.   [07]
  b) Define affective disorder and discuss the management of Affective disorder. [05]

Q.8 Write short notes on **ANY THREE** of the following: [12]
  a) Opioid analgesics
  b) PICO Analysis
  c) Drug therapy for insomnia
  d) Adverse effects of Lithium

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Day: **Wednesday**

Date: **05·07·2017**

Time: 2·00 P.M. To 5·00 P.M

Max. Marks: 70

N.B.:

1) **Q. No. 1 and Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.

2) Figures to the right indicate **FULL** marks.

3) Answers to both the sections should be written in **SEPARATE** answer books.

SECTION-I

Q.1 A) Answer any **FOUR** out of **SIX**: **(08)**
  i) Define Pharmacovigilance.
  ii) Expand following abbreviations SGPT and MCHC.
  iii) What is Patient history interview?
  iv) What is the significance of BUN?
  v) Define medical ward rounds.
  vi) Define Drug Utilization Evaluation.

B) What are augmented adverse drug reactions? Give examples. **(03)**

Q.2 What is drug information service? Discuss various advantages and disadvantages of different resources. **(12)**

Q.3 a) Enlist different liver function tests. Explain tests that signify hepatic injury. **(07)**
  b) Discuss medication order review. **(05)**

Q.4 Answer any **THREE** of the following: **(12)**
  a) Management of Adverse Drug Reactions.
  b) Pharmacist Intervention.
  c) Therapeutic drug monitoring.
  d) Clinical Review
  e) Patient counseling aids

SECTION-II

Q.5 A) Answer any **FOUR** out of **SIX**: **(08)**
  i) Expand FEV and LDH.
  ii) What is tidal volume?
  iii) What is hyperkalemia?
  iv) Give significance of serum calcium.
  v) What is MBC? Give its significance.
  vi) What are aims of Pharmacovigilance?

B) How will you report adverse drug reaction? **(03)**

Q.6 What is Poison information service? Discuss the approach for answering Poison information query. **(12)**

Q.7 a) Discuss various scales used for causality assessment of Adverse Drug Reactions. **(07)**
  b) Explain the setup of a drug information Centre. **(05)**

Q.8 Answer any **THREE**: **(12)**
  a) Nonverbal communication skills
  b) Poison information resources.
  c) Lung flow tests
  d) Cardiac enzymes
  e) Hyponatremia

Day : Thursday

Date : 06-07-2017

Time : 2:00 P.M. To 5:00 P.M.

Max. Marks : 70

N.B.:

1)   **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section.

2)   Answers to both the sections should be written in the **SEPARATE** answer books.

3)   Statistical tables and graph papers will be supplied at the examination centre.

4)   Use of non-programmable electronic pocket calculator is **ALLOWED**.

5)   Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 A) Answer ANY FOUR of the following: [08]

i)   Explain the term 'Hypothesis'.

ii)   What do you understand by the term 'Research Design'?

iii) State any one modification introduced to avoid bias in the 'Intervention study'.

iv)   Indicate one important application of computers in community pharmacy.

v)   Give the long form of MEDLARS.

vi)   What is the advantages of using the Alpha-Numeric codes instead of Numeric Codes?

B) Differentiate between Parallel Experimental Design and Cross-over [03] Experimental Design.

Q.2   What do you understand by the term 'Interventional Studies'? Discuss the [12] various modifications introduced to avoid any bias in the 'Interventional Studies'.

Q.3   Describe in details the role of computers in the Hospital Pharmacy indicating [12] in details the various systems used.

Q.4   Describe the procedure for determining the sample size while estimating the [12] mean using the confidence level approach.

SECTION – II

Q.5 A) Answer ANY FOUR of the following: [08]

i)   Give one example of the continuous variable.

ii)   Write the minimum and the maximum value of the Probability.

iii) Give the maximum value of Karl Pearson's Correlation coefficient.

iv)   Compute the median and mode for the following:
      23, 43, 17, 43, 58, 62, 45.

v)   Give one example of Poisson Distribution.

vi)   Explain the term 'Standard Probability Distribution'.

B) Explain in details the terms Incidence and Prevalence.   [03]

P.T.O.

Q.6 a) Draw the 'Less than Ogive' curve for the following data: **[07]**

Age of the patient	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40
No. of patients	3	9	23	16	8	2

Using the graph find the approximate value of the Median.

b) The data gives the diastolic B.P. of two patients during a week. **[05]**

A	120	125	123	119	109	126	130
B	130	113	127	128	119	117	126

Find the Coefficient of Variations and decide the patient having consistent B.P.

Q.7 a) The Hb values for some ladies in Europe and Africa are as below: **[07]**

	Hb count gm%						
Europe	14.0	14.5	15.0	15.3	14.7	14.8	15.1
Africa	14.2	14.4	14.7	15.0	14.4	14.6	14.9

Use the sign test to test whether the Hb values for the ladies in Europe and in Africa differ significantly.
(Use 5% L.O.S).

b) If the average count of RBCs for the healthy men is 5.0 million/mm³ find the probability that the RBC count for a randomly selected healthy man is exactly 6.0 million/mm³. **[05]**

Q.8 a) Following are the cholesterol values (mg%) for men in different professions: **[07]**

Teachers	160	153	157	159	163
Lawyers	230	222	228	240	237
Grain dealers	180	177	165	173	179

Draw ANOVA Table and test whether the cholesterol values for the professions differ significantly.
(Use 5% L.O.S).

b) The results of using the newly developed drug for curing the Dengue are as below: **[05]**

	Drug used	Drug not used (conventional method used)
Cured	80	85
Not cured	25	65

Determine whether the newly developed drug is effective for curing the disease.
(Use 5% L.O.S.)

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Day : Friday   Time : 2·00 P.M. To 5·00 P.M.
Date : 07.07-2017   Max. Marks : 70

N.B.:

1) Q.No.1 and Q.No.5 are compulsory. Out of the remaining questions attempt **ANY TWO** questions from each section.
2) Answers to both the sections should be written in the **SEPARATE** answer books.
3) Draw neat and labeled diagrams **WHEREVER** necessary.
4) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 a) Answer **ANY FOUR** of the following: [08]
    i) What is blood brain barrier and placental barrier?
    ii) What are hydrolytic reactions of biotransformation?
    iii) What is Fick's first law of diffusion?
    iv) Write Biopharmaceutical Classification System of drugs with examples.
    v) What is dialysis and haemoperfusion?

b) Write the sequence of events in the absorption of drugs from orally [03] administered solid dosage forms.

Q.2 Discuss formulation related factors affecting absorption of drugs. [12]

Q.3 a) Discuss Phase – I and Phase – II reactions in biotransformation. [07]

b) Write the difference between plasma protein-drug binding and tissue-drug [05] binding.

Q.4 Write short notes on **ANY THREE** of the following: [12]
  a) Enterohepatic cycling
  b) Salt form of drug
  c) Active transport
  d) Barriers to drug distribution

SECTION – II

Q.5 a) Answer **ANY FOUR** of the following: [08]
    i) Define pharmacokinetics and clinical pharmacokinetics.
    ii) Explain dosage regimen and therapeutic window.
    iii) What is zero order kinetics?
    iv) Explain elimination half-life.
    v) What is nonlinear pharmacokinetics?

b) If the plasma concentration of viomycin after i.v. bolus administration was [03] found to be 10 and 5.5 mcg/ml at 2 and 4 hours respectively, assuming one-compartment kinetics. Calculate half life of the drug.

Q.6 Derive the pharmacokinetic parameters for iv bolus administration assuming [12] one compartment open model.

Q.7 a) Elaborate on the study designs employed to establish bioequivalence. [07]

b) Write the difference between compartment and physiological model. [05]

Q.8 Write short notes on **ANY THREE** of the following: [12]
  a) Methods for enhancement of bioavailability
  b) In-vitro drug dissolution testing models
  c) Sigma minus method
  d) Statistical moment theory

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Day: Saturday

Date: 08.07.2017

Time: 2.00 P.M. To 5.00 P.M.

Max Marks. 70

N.B.

1) Q. No. 1 and Q. No. 5 are **COMPULSORY**.
2) From the remaining answer any other **TWO** questions from Section - I and **TWO** questions from Section - II.
3) Answer Section - I and Section - II on **SEPARATE** answer books.
4) Figures to the right indicate **FULL** marks.

SECTION - I

Q.1 a) Answer any **FOUR** of the following   (08)

i) Define poison

ii) Enumerate types of poisoning

iii) Enlist signs and symptoms of opiate poisoning.

iv) What is vitriolage?

v) Mention signs and symptoms of ammonia poisoning.

vi) What are signs and symptoms of radiation toxicity?

b) Describe the signs and symptoms of radiation poisoning.   (03)

Q.2 Describe the signs and symptoms, treatment, post mortem appearances and medico legal aspect of ethyl alcohol poisoning.   (12)

Q.3 a) Explain the elimination of poison (decontamination).   (07)

b) Explain the supportive case in treatment of poisoning.   (05)

Q.4 Write short notes of **THREE** of the following.   (12)

a) Antidotes

b) Hydrochloric acid poisoning

c) Petroleum product toxicity

d) Paracetamol poisoning

P.T.O.

SECTION - II

Q.5 **a)** Answer any **FOUR** of the following (08)

    i) Name four oral iron preparations.

    ii) Constituents of snake venom

    iii) Name two poisoning spiders.

    iv) What are symptoms of scorpion bite?

    v) What is lathyrism?

    vi) Enumerate the characteristics of substance abuse.

    b) What are the signs, symptoms and treatment of bee venom toxicity? (03)

Q.6 Describe the signs and symptoms, treatment, post mortem appearance of (12) chronic mercury poisoning.

Q.7 **a)** Define substance abuse. Explain hazards and treatment of tobacco poisoning. (07)

    b) Describe the mushroom poisoning and its management. (05)

Q.8 Write short notes of **THREE** of the following. (12)

    a) Antivenin therapy of snake bite

    b) Aflatoxins

    c) Copper poisoning

    d) Botulism

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MANIKGAD-IV: SUMMER 2017
SUBJECT: PHARMACOTHERAPEUTICS-I + II

Day : Monday   Time: 2.00 P.M. TO 5.00 P.M.
Date : 10-07-2017   Max. Marks: 70.

N.B.:

1) Q. No. 1 and Q. No. 5 are **COMPULSORY**.
2) Out of the remaining attempt any **TWO** questions from Section-I and any **TWO** Questions from Section-II.
3) Answers to the two sections should be written in **SEPARATE** answer books.
4) Figures to the **RIGHT** indicate full marks.

SECTION-I

Q.1 a) Attempt any **FOUR** of the following: **(08)**

 i) Explain JNC-7 guidelines for Hypertension.

 ii) Classify Beta-Blockers and give their adverse effects.

 iii) Enumerate various INSULIN preparations.

 iv) Enlist trigger factors of Asthma.

 v) Give a brief on Oral Contraceptives.

 vi) Write down clinical significance of PFT.

 b) Explain Electrophysiological properties of Heart. **(03)**

Q.2 Explain in detail Etiology of Congestive cardiac Failure, clinical presentation, **(12)** diagnosis and Management of CCF.

Q.3 a) Describe Geriatric Prescribing Guidelines. **(07)**

 b) Role of Pharmacist in Rational Prescribing. **(05)**

Q.4 Write short notes on **THREE** of the following: **(12)**

 a) Stepwise management of Asthma

 b) Management of Type-I Diabetes

 c) Pathophysiology and clinical presentation of Myocardial-Infarction

 d) EML and its significance.

         P.T.O.

(08)

Q.5 a) Attempt any **FOUR** of the following:

   i) List factors causing atopic eczema

   ii) Name two drugs causing psoriasis form eruptions.

   iii) Enlist factors which exacerbate chronic renal failure.

   iv) Classify acute renal failure with its characteristics.

   v) Name two drugs causing systemic lupus erythematosus.

   vi) Surgical prophylaxis with antibiotics.

   b) Name three drug-interactions of antifungal agents with other drugs indicating (03) consequences.

Q.6 Describe infections of lower respiratory tract with special reference to COAD and (12) pneumonia.

(07)

Q.7 a) Explain basic principles of cancer therapy.

(05)

   b) Comment on drug induced renal disorders with suitable examples.

(12)

Q.8 Write short notes on **THREE** of the following:

   a) Psoriasis (Pathophysiology)

   b) Viral infections

   c) Osteoarthritis

   d) DOTS Therapy.

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