

### Assignments of PGDPSM – July 2020

Dear Students,

As explained in the programme guide Post Graduate Diploma in Pharmaceutical Sales Management Programme (PGDPSM), you have to do one assignment for each course.

#### **Instructions for Formatting Your Assignments**

Before attempting the assignments, please read the following instructions carefully.

1. On top of the first page of each answer sheet, please write the details exactly in the following format:

|              |   | Enrolment No: |
|--------------|---|---------------|
|              |   | Name :        |
|              |   | Address:      |
| Course Code  | : |               |
| Course Title | : |               |
| Study Centre | : | Date :        |
|              |   |               |

# PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2. Use A4 size writing paper of good quality (but not of very thin variety) for writing your answers.
- 3. Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4. Your answers should be precise, **handwritten**. They should **not be copied from the text material as it is** and rather should be written in your own language.
- 5. Answers in the form of photocopy or scanned from any source will **not** be accepted.
- 6. While solving problems, clearly indicate the question number along with the part being solved.
- 7. You may also see the videos related to all courses at the following link: <a href="http://www.ignou.ac.in/ignou/aboutignou/broadcast/1">http://www.ignou.ac.in/ignou/aboutignou/broadcast/1</a> You may go to youtube archives and search the video by typing in the desired keyword followed by 'ignousovet' i.e., 'Pharmaceutical Chemistry by ignousovet' will open a video on the said topic.
- 8. The assignments should be submitted at your study centre **before the last date** mentioned in each assignment. In case there is no study centre then submit them at the following address:

Programme Coordinator, PGDPSM

Block 15E, 1<sup>st</sup> Floor,

School of Vocational Education and Training

Indira Gandhi National Open University

Maidan Garhi, New Delhi 110068.

Phone: 011-29571647/2822

We strongly suggest that you should retain a copy of your assignments to avoid any unforeseen situation.

Wishing you all good luck.

# Assignment I Course MVE-001: Introduction to Anatomy, Physiology and Pharmaceutical Chemistry

Course Code: MVE 001

Assignment Code: MEV 001/TMA 2020

Maximum Marks: 100

Last Date: 20<sup>th</sup> February 2021

Answer all the questions given below.

| 1. |                         | ne main features of a muscle tissue? Differentiate between skeletal, and cardiac muscle tissues.       | (5) |
|----|-------------------------|--|-----|
|    | (b) Describe w          | ith the help of a well labeled diagram the structure of a cell membrane.                               | (5) |
| 2. | (a) Differentia         | ate between systolic and diastolic blood pressure.   | (5) |
|    | (b) Describe            | any two disorders of the respiratory system.   | (5) |
| 3. | (a) Describe            | the role of Liver and Pancreas in the process of Digestion.  | (5) |
|    | (b) Write a s           | hort note on the anterior pituitary gland and its hormones.  | (5) |
| 4. | (a) List the of vision. | three main layers of the human eye and explain the physiology  | (5) |
|    | (b) Draw the            | e structure of a Kidney and explain the role of a Nephron.   | (5) |
| 5. | (a) Describe            | the process of acute Inflammation.   | (5) |
|    | (b) Differen            | tiate between the terms hypoglycaemia and hyperglycaemia.  | (5) |
| 6. | (a) Explain th          | ne term topical agent. Discuss the different types of topical agents briefly.                          | (5) |
|    | (b) Fill in th          | e following blanks:  | (5) |
|    | i.                      | Buffer is a solution of weak acid and its whose pH change on addition of small amount of acid or base. |     |
|    | ii.                     | According to Lewis acid is acceptor and according to   |     |
|    | iii.                    | Bronsted - Lowry base is acceptor.   |     |
|    | iv.                     | pH of a base will be more than<br>pH of Human Blood is   |     |
|    | v.                      | Cathartics are the drugs which bring about   |     |
|    | vi.                     | In paper chromatography, components of the extracts get distributed between two                        | 0   |
|    |                         | liquid phases- one phase is and other is   |     |
|    | vii.                    | A decrease in bone mineral density leads to  |     |

| Q. 7. (a | a) Give the | functional group of the following:  | (5) |
|----------|-------------|---|-----|
| `        | i.          | Phenol  |     |
|          | ii.         | Ether   |     |
|          | iii.        | Ketone  |     |
|          | iv.         | Thiol   |     |
|          | v.          | Ester   |     |
|          | vi.         | Anyhdride   |     |
|          | vii.        | Amine   |     |
|          | viii.       | Acyl halide   |     |
|          | ix.         | Nitrile   |     |
|          | х.          | Amide   |     |
| (b)      | Give one    | example each of the following:  | (5) |
|          | i.          | E and Z isomers   |     |
|          | ii.         | cis and trans isomers   |     |
|          | iii.        | Chain isomer  |     |
|          | iv.         | Functional Group isomers  |     |
|          | V.          | Enantiomers of 2- butanol.  |     |
| 8 (a)    | Explain the | e following terms in 1-2 lines.   | (5) |
| 0. (a)   | i.          | Carbohydrate  | (3) |
|          | ii.         | Oils and Fats   |     |
|          | iii.        | Alkaloids   |     |
|          | iv.         | Fractional crystallization  |     |
|          | v.          | Fractional distillation   |     |
| (b)      | Give the a  | dvantages and disadvantages of synthetic and natural product drugs.           | (5) |
| 9. (a)   | What do yo  | ou understand by the term SAR? Explain briefly.                               | (5) |
| (b)      | Write shor  | t note on Neoplasm.   | (5) |
| 10. (a)  | What do y   | ou understand by the terms GLP, GMP and GCP? Explain briefly.                 | (6) |
|          | (b) Describ | be briefly two Quality control tests for Parenterals/Injectable dosage forms. | (4) |

# Assignment II Course MVE 002: Pharmacology and Toxicology

Course Code: MVE 002

Assignment Code: MEV 002/TMA 2020
Maximum Marks: 100

Last Date: 20<sup>th</sup> February 2021

Answer all the questions given below.

| Q.1  | Brief | Briefly describe the various Sources and Routes of Drug Administration.  |      |  |
|------|-------|--|------|--|
| Q.2  | What  | do you understand by cholinergic and anti-cholinergic agents? How do they work? Discuss the common drugs used as cholinergic agents. | (10) |  |
| Q.3  | a)    | List the various drugs used in arrhythmia and discuss their therapeutic uses.  | (5)  |  |
|      | b)    | Define and classify Anaemia giving its cause.  | (5)  |  |
| Q.4  | a)    | Describe the chemical use of potassium sparing diuretics and osmotic diuretics.  | (5)  |  |
|      | b)    | What are autacoids? List the important autacoids. Briefly discuss action of any two autacoids.                                       | (5)  |  |
| Q.5  |       | Describe the mechanism and action of the drugs used in the treatment of cough.   | (10) |  |
| Q.6  | Defi  | ne and give examples of Preanaesthetic medications. Differentiate between Inhalation and Intravenous anaesthetics, give examples.    | (10) |  |
| Q.7  | a)    | What are Quinolones? Describe some important quinolones with their therapeutic uses.   | (5)  |  |
|      | b)    | Briefly describe antifungal agents.  | (5)  |  |
| Q.8  | a)    | Discuss the sign and symptoms of methyl alcohol poisoning? What is the treatment for this poisoning?                                 | (5)  |  |
|      | b)    | Explain the mechanism of drug antagonism and synergism with examples.  | (5)  |  |
| Q.9  | a)    | What is the role of Pituitary gland in the body?   | (5)  |  |
|      | b)    | What are micronutrients? Discuss their therapeutic role.   | (5)  |  |
| Q.10 | Write | e short notes on the following:  | (10) |  |
|      | a)    | Laxatives  |      |  |
|      | b)    | Antidiarrhoel agents   |      |  |

# Assignment III Course MVE 003: Pharmaceutics

Course Code: MVE 003

(5)

Assignment Code: MEV 003/TMA 2020 Maximum Marks: 100 Last Date: 20<sup>th</sup> February 2021 Answer all the questions given below. 0.1 What is a dosage? Calculate the dose of a drug for a one year old and an 11 year old child, if the adult dose is 500 mg. (5) b) What are Liquid dosage forms? Give their advantages and disadvantages. (5) Q.2 Explain the following terms in 1-2 lines: a) (5) **Elixirs** i) ii) Enemas iii) Collodions Douches iv) Suppositories v) b) What do you understand by the term Sterilization? Descirbe any one menthod of sterilization. (5) Q.3 a) What are parenterals? Describe its different routes of administration. (5) b) What are the different forms of Ointments? Discuss each of them briefly in your own words. (5) Q.4 a) Describe the various types of gastro-intestinal devices. (5) b) Explain the following terms in 1-2 lines: (5) i) **CDDS** Transdermal ii) iii) Negative Contrast Media Electromagnetic radiation iv) Bioequivalence Q.5 a) Fill in the following blanks: (5) ----- diffusion describes the movement of drug from region of high concentration to lower. ii) -----indicates a measurement of rate and extent of the active drug delivered to general circulation. The diet tends to decrease the acidity of gastric fluid to a pH of about ----------- is a measure of drug elimination from body without reference to the mechanism of process. Physical absorption by invagination of cell membrane is known as -----

b) What are the pharmaceutical factors which affect on absorption of drugs? Discuss each of

them briefly.

| Q.6  | Give the importance of the following in 3-4 lines only.  i) Controlled Trial  ii) Nuremberg Code  iii) Antioxidants  iv) Biopharmaceutics  v) Open Trial                          | (10)   |
|------|---|--------|
| Q.7  | a) Fill in the following blanks:  | (5)    |
|      | i)is defined as a hybrid cell produced by the fusion of an antibody-pro lymphocyte with a cell and used to culture continuously a specific mantibody.                             |        |
|      | ii) molecules can be fragmented by passing their suspension through a s   | yringe |
|      | needle.   |        |
|      | iii)enzyme catalyses the formation of phosphodiester bond between base  | pairs. |
|      | iv) Mabs are immunoglobulins of a single species derived from the cloned  | , its  |
|      | fused derivatives or transformants.   |        |
|      | b) What do you understand by monoclonal antibodies? Explain briefly.  | (5)    |
| Q.8  | Give the uses of the followings  i) Sunscreen cream  ii) Vitamin cream  iii) Hair grooming aids  iv) Mouth gargle  v) Massage cream   | (10)   |
| Q. 9 | a) What are Phytochemicals? Explain with suitable examples.   | (5)    |
|      | b) Discuss ingredients of Nutraceuticals briefly.   | (5)    |
| 10.  | <ul> <li>a) Explain the following terms in few lines</li> <li>i) Composition of face powder</li> <li>ii) Composition of aftershave lotion</li> <li>iii) Bifidobacteria</li> </ul> | (6)    |
|      | b) What are the proposed therapeutic uses of probiotics?  | (4)    |

#### Assignment IV Course MVE004: Drugs Regulatory Affairs

Course Code: MVE 004

Assignment Code: MEV 004/TMA 2020

Maximum Marks: 100

Last Date: 20th February 2021

#### SECTION A

#### Answer all the questions given below.

(5x8 = 40)

- Q1. Give different phases of evolution in Indian Pharmaceutical Industry in tabular form.
- Q2. Enlist the agencies responsible for enforcement of NDPS Act.
- Q3. Define Genetic engineering and microorganisms.
- Q4. What is Education Regulations (ER) and who frames it?
- Q5. Give a brief account of Toxicity studies in a tabular form.
- Q6. Describe approval process of Vaccine.
- Q7. Indicate whether the following statements are True (T) or False (F).
  - i) The first council of PCI was constituted in 1948.
  - ii) Opium crop must be tendered to the central Government at prices fixed by the Government.
  - iii) Heart diseases don't fall under Drugs and magic Remedies Act.
  - iv) Recombinant DNA Safety Guidelines are issued by GEAC.
  - v) The Department of Biotechnology (DBT) comes under Ministry of Fertilizers and chemicals.
- Q8. Give the full form of the following
  - i) CRAMS
  - ii) IPA
  - iii) GEAC
  - iv) IRFA
  - v) CBER

#### SECTION B

#### Answer all four Questions. All Question carry equal marks.

(15x4=60)

- Q9. Explain the procedure adopted by NPPA for Price Fixation of Drugs.
- Q10. Give an overview of the governing body of the Indian Council of Medical Research.
- Q11. What are different phases in clinical evaluation of a drug in human beings?
- Q12. Give a brief account of Poisons Act and MTP Act.

### Assignment V **Course MVE-005: Introduction to Management**

Course Code: MVE-005

Assignment Code: MEV 005/TMA 2020 Maximum Marks: 100 Last Date: 20<sup>th</sup> March 2021

## Answer all the questions given below

| Q1.                            | Fill in the blanks:  |  | (1x5=5)   |
|--------------------------------|--|--|-----------|
| i.<br>                         | is the law of the jungle which is equally applicable to the competitive market place where firms struggle and fight for survival.  |  |           |
| 11.<br>iii.<br>iv.<br>v.       | The ability to select, train and induct people in jobs comes under the OC refers to the perceived environment of an organization.  |  |           |
| Q2.                            | True or False:   |  |           |
| i.<br>ii.<br>iii.<br>iv.<br>v. | There are three methods of estimations of manpower supply in the macro forecasting Management control is usually viewed as a feedback system.  Power is the ability to exercise influence or control over others.  Every formal organization has informal groups.  A manager's effectiveness does not lie in making good and timely decisions. |  | sting     |
| Q3.                            | Match the following:   |  | (1x5=5)   |
| i.<br>ii.<br>iii.<br>iv.<br>v. | Bounded Rationality Model The Bottoms up Strategy The Johari Window Hawthorne Studies Balance theory   | <ul><li>a. Group Formation</li><li>b. Increasing Interpersonal Awareness</li><li>c. Implementing change</li><li>d. Decision -Making</li><li>e. Leadership styles</li></ul> |           |
| Q3.                            | Write short notes on any two:  |  | (10x2=20) |
| i.<br>ii.<br>iii.              | Goals<br>Decision making under Risk<br>Responsibility of manager towards his   | dealers  |           |
| Q4.                            | Differentiate between any two:   |  | (10x2=20) |
| i.<br>ii.<br>iii.              | Perception and Attitude Role and responsibilities of top level and first level managers Formal groups and informal groups  |  |           |
| Q5.                            | What is Stress? List the causes of Stress and explain any three.   |  | (20)      |
| Q6.                            | What do you understand by two manpower demand forecasting techniques? Explain any tw manpower demand forecasting techniques.   |  |           |

# Assignment VI Course MVE-006: Sales Management

Course Code: MVE-006

Assignment Code: MEV 006/TMA 2020
Maximum Marks: 100
Last Date: 20<sup>th</sup> March 2021

### Answer all the questions given below

| Q1.         | Fill in the blanks:   |   | (1x5=5)                       |  |
|-------------|---|---|-------------------------------|--|
| i.          | is the so   | et of marketing tools that the firm uses to pur | sue its marketing             |  |
|             | objectives in the target market.  |   |                               |  |
| ii.         | Personal Selling is more effective during the stage.  |   |                               |  |
| iii.        | The three common ways in which online product is purchased are,,  |   |                               |  |
| iv.         | The sales budget uses the as a point of departure.  |   |                               |  |
| v.          |   |   |                               |  |
| Q2.         | True or False:  |   | (1x5=5)                       |  |
| i.          | Establishing sales territories assures proper market coverage   |   |                               |  |
| ii <b>.</b> | Projecting past sales is totally un   | nreliable for use in sales forecasting          |                               |  |
| iii.        | Quotas are quantitative objective   | es assigned to specific sales unit              |                               |  |
| iv.         | The sales budget is a projection of what a given sales programme should mean in terms of sales volume and profits                           |   |                               |  |
| v.          | The original source of data for sales analysis is sales forecast  |   |                               |  |
| Q3.         | Match the following:  |   | (1x5=5)                       |  |
| i.          | Marketing Mix   | a. Gestures                                     |                               |  |
| ii.         | Buying- Formula Theory  | b. Theories of selling                          |                               |  |
| iii.        | Kinesics  | c. Ads and Malware                              |                               |  |
| iv.         | To point  | d. Non verbal Communication                     |                               |  |
| v.          | Trojans   | e. Four P'                                      |                               |  |
| Q4.         | Write short answers on any two:   |   | (10x2=20)                     |  |
| i.          | Factors determining length of th  | e Channel                                       |                               |  |
| ii.         | Qualities of a good medical repr  | resentative                                     |                               |  |
| iii.        | Sales forecasting for new production  | cts   |                               |  |
| Q4.         | Differentiate between any two   | <b>:</b>  | (10x2=20)                     |  |
| i.          | Pharmaceutical products and co  | nsumer products.                                |                               |  |
| ii.         | Structured Interview and non- st  | tructured interview                             |                               |  |
| iii.        | Centralization vs. Decentralization   | ion   |                               |  |
| Q5.         | What are the different modules of training and which module would you suggest for trainin newly recruited Medical Representative? (5+15=26) |   | gest for training a (5+15=20) |  |
| Q6.         | What is Presentation? Explain the   | ne types of Sales Presentation.                 | (5+20=25)                     |  |