

# KERALA UNIVERSITY OF HEALTH SCIENCES

## M. Pharm – 2017 Scheme

### Semester II

#### Guidelines for conducting End Semester Practical examination

(Total marks -100                      Duration ---6 hrs)

#### 1. Specialisation –Pharmaceutics – MPH205P

1. Synopsis- 20 minutes - ( Based on experiments mentioned in KUHS Syllabus) 15 marks
2. Major Experiment ( Any of the following) (40 marks)
  - a) Preparation and evaluation of microspheres/liposomes
  - b) Formulation and evaluation of cream using different excipients.
  - c) Protein binding studies of highly protein bound and poorly protein bound drugs.
  - d) Comparison of Dissolution of different marketed products /brands
3. Minor experiment ( Any of the following) (30 marks)
  - a. Improvement of dissolution characteristics of slightly soluble drug by solid dispersion technique
  - b. Formulation and evaluation of /shampoo/toothpaste
  - c. Formulation data analysis /DoE using experimental design software
  - d. Pharmacokinetic data analysis by pharmacokinetic software
4. Viva voce -15 marks

#### 2. Specialisation –Pharmaceutical Chemistry – MPC205P

1. Synopsis- 20 minutes - 15 marks ( Based on experiments mentioned in KUHS Syllabus)
2. Major Experiment (40 marks)
  - (A) Synthesis of any one organic compound by Oxidation /Reduction / Nitration (20 marks)
  - (B) One experiment from Computer Aided Drug Design (20 marks)
3. Minor Experiments (30 marks)
  - (A) Synthesis of any one organic compound by microwave assisted reactions (15 marks)
  - (B) Identification of any one organic compound by spectral Interpretation using IR, NMR and Mass (15 marks)

4. Viva voce -15 marks

### 3. Specialisation –Pharmacognosy – MPG205P

1. Synopsis- 20 minutes - 15 marks ( Based on experiments mentioned in KUHS Syllabus)

2. Major Experiment- 40 marks

a. Standardisation of a herbal hair oil / a herbal shampoo / choorna /any other herbal liquid formulation  
-20 marks

b. Preparation of a herbal cream / herbal liquid formulation -20 marks

3. Minor Experiment -30 marks

Estimation of total alkaloidal content / phenolic content / flavanoid content

OR

Evaluation of a herbal tablet / capsule

OR

Estimation of aldehyde content of a volatile oil

OR

Initial steps for establishment of Callus culture

4. Viva voce -15 marks

### 4. Specialisation –Pharmaceutical Analysis – MPA205P

1. Synopsis- 20 minutes - 15 marks ( Based on experiments mentioned in KUHS Syllabus)

2. Major Experiment (40 Marks)

(a) Quality control of formulation / packaging materials (20 Marks)

(b) Saponification value or Acid value (20 Marks)

3. Minor Experiment (30 Marks)

(a) Identification of compounds by spectral interpretation (FT-IR, NMR, <sup>13</sup>CNMR & MS)

(b) Determination of Calcium thioglycolate in depilatories (15 + 15Marks)

4. Viva – Voce (15 Marks)

## 5. Specialisation –Pharmacology – MPL205P

1. Synopsis- 20 minutes - 15 marks ( Based on experiments mentioned in KUHS Syllabus)

2. Major Experiment- 40 marks

Determination of the concentration of the given sample by Multiple point bioassay using a suitable tissue- 40 marks

Preparation of graphs - 30 marks

Calculation - 10 marks

3. Minor Experiment -30 marks

Estimation of  $pA_2$  value of the given antagonist using suitable isolated tissue

OR

Drug absorption studies using everted ileum preparation

OR

Finding the Docking score of the given chemical structure with the given receptor using appropriate softwares

4. Viva voce -15 marks

## 6. Specialisation – Pharmacy Practice — MPP205P

1. Synopsis- 20 minutes - 15 marks ( Based on experiments mentioned in KUHS Syllabus)

2. Major Experiment- 40 marks

Case study presentation as per **SOAP** format

3. Minor Experiment -30 marks

Detection/identification, monitoring and interpretation of

**Adverse Drug Reactions/Medication Errors** in the given

Case /presentation

4. Viva voce -15 marks