**Case number 1**

**The pharmacy received a prescription for the manufacture of a medicinal product according to the prescription:**

Recipe: Analgini

 Butadioni ana 0.1

 Misce fiat pulvis

 Da tales doses N 10.

 Signa. By 1 powder 3 times a day orally

1. Tell requirements for these dosage form and indicators of its quality.
2. Manufacturing technology of a medicinal product in a pharmacy.
3. Calculation of the total mass of a medicinal product, the amount of medicinal substances, How to control doses of potent substances in powders.
4. Packaging for the dispensing and labeling of the dosage form.
5. Passport ofwritten control.

**Case number 2**

**In the stage of development of pilot industrial regulations in the technological laboratory of the Pharmaceutical factory, the technology of tablets “AcidumAcetylsalicylicum” is being tested.**

Composition for one tablet:

Acidum Acetylsalicylicum 0.5

**Excipients:**

Amylum 0.088

Talcum 0.012

Describe:

1. Main requirements for these dosage form and indicators of its quality.
2. The principle of selection of excipients in the production of tablets. Classification of excipients.
3. The devices and principle of operations of modern equipment used in the production of tablets.
4. Technological scheme for the production of tablets by direct compression, material balance.
5. Pharmaceutical factors influencing on the therapeutic effect in the industrial production of dosage forms.

**Case number 3**

**The pharmacy received a prescription for the manufacture of a medicinal product according to the prescription:**

Recipe: Morphini hydrochloridi 0.0002

 Sachari 0.2

 Misce fiat pulvis

 Da tales doses No. 20.

 Signa. By 1 powder 3 times a day.

1. Tell requirements for these dosage form and indicators of its quality.
2. Pharmaceutical manufacturing technology of a medicinal product in a pharmacy.
3. Calculation of the total mass of a medicinal product, the amount of medicinal substances, How to control doses of potent substances in powders.
4. Packaging for the dispensing and labeling of the dosage form. Evaluation of the quality of the medicinal product.
5. Passport of written control.

**Case number 4**

**The pharmacy received a prescription for the manufacture of a medicinal product according to the prescription:**

Recipe: Analgini 0.2

 Camphorae 0.03

 Sacchari 0.3

 Misce fiat pulvis

 Da tales doses No. 20.

 Signa. By 1 powder 3 times a day orally.

1. Tell basic requirements for the dosage form and indicators of its quality. Powder manufacturing steps. Features of the technology of powders with hard-to-grind substances.
2. Pharmaceutical manufacturing technology of a medicinal product in the pharmacy.
3. Calculation of the total mass of the medicinal product, the amount of medicinal substances, individual single doses. Control doses.
4. Packaging and labeling of the dosage form.
5. Passport of written control.

**Case number 5**

**At the pharmaceutical enterprise, the production of the fee "BRUSNIVER-T" of the following composition is carried out:**

COMPOSITION: Folia UvaeUrsi 30,0

 Fructus Rosae 40,0

 Herba Hyperici 20,0

 Herba Bidens tripartita 10,0

Describe:

1. Fees (Species) as a dosage form and provide a technological scheme for their production.
2. Grinding and principle of operation of devices used for grinding medicinal plant materials.
3. Screening. The device and principle of operation of screening mechanisms.
4. Mixing. Mixers used in the production of fees. Packing, packaging and labeling of fees.
5. Pharmaceutical factors in the industrial production influencing the therapeutic effect of dosage forms

**Case number 6**

**At the pharmaceutical enterprise, the antibiotic “Ampiox” is produced in hard gelatin capsules with caps.**

Describe:

1. Capsules as a dosage form, their classification and nomenclature. Auxiliary substances in capsule’s production.
2. Gelatin. Properties. Obtaining of Gelatinum.
3. Technological scheme for the production of capsules.
4. Capsule formation methods. The device and the principle of operation of the apparatus.
5. Pharmaceutical factors in the industrial production influencing the therapeutic effect of dosage forms.

**Case number 7**

**The pharmacy received a prescription for the manufacture of a medicinal product according to the prescription:**

Recipe: Dimedroli 0.02

 Rutini 0.05

 Calcii gluconatis 0.3

 Acidi ascorbinici 0.1

 Acidi acethylsalicylici 0.25

 Misce fiat pulvis

 Da tales doses No. 20.

 Signa. By 1 powder 3 times a day.

1. Tell basic requirements for the dosage form and indicators of its quality.
2. Pharmaceutical manufacturing technology of a medicinal product in a pharmacy.
3. Calculation of the total mass of the medicinal product, the amount of medicinal substances and the mass of one dose. Control doses.
4. Packaging for the dispensing and labeling of the dosage form. Evaluation of the quality of the medicinal product.
5. Passport of written control.

**Case number 8**

**The pharmacy received a prescription for the manufacture of a medicinal product according to the prescription:**

Recipe: Extracti Belladonnae 0.015

 Anestezini 0.1

 Magnesii oxydi 0.3

 Misce fiat pulvis

 Da tales doses No. 20.

 Signa. By 1 powder 2 times a day.

1. Tell requirements for these dosage form and indicators of its quality. Classification and characteristics of extracts used in the manufacture of powders.
2. Pharmaceutical manufacturing technology of a medicinal product in a pharmacy.
3. Calculation of the total mass of a medicinal product, the mass of one dose, the amount of medicinal substances. How to control doses of potent substances in powders.
4. Packaging for the dispensing and labeling of the dosage form. Evaluation of the quality of the medicinal product.
5. Passport of written control.