

**APRIL 2001**

**[KD 283]**

**M.Pharmacy DEGREE EXAMINATION.**

**(New Regulations)**

**First Year**

**Branch V — Pharmaceutical Analysis**

**Paper IV — FOOD ANALYSIS**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FOUR questions.**

**All questions carry equal marks.**

1. Write the methods for analysing various carbohydrates in food products. (25)

2. Write the various methods of estimation of Nitrogen in food products. (25)

3. (a) How will you estimate trace elements in food products?

(b) Discuss in brief, the various methods of determining moisture content in foods. (25)

4. How will you extract and quantify

(a) Caffeine in Tea

(b) Chicory in coffee. (25)

5. (a) Determination of alcohol in beverages.

(b) What are the official standards for drinking water and tests carried out for the same? (25)

6. (a) What are canned foods? How are they processed? What are the QC standards for such products?

(b) What are ash values and their significance in the Quality Control of food products? (25)

**APRIL 2001**

**[KD 302]**

**M.Pharmacy DEGREE EXAMINATION.**

**(Revised Regulations)**

**First Year**

**Branch V — Pharmaceutical Analysis**

**Paper II — FOOD AND COSMETIC ANALYSIS**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL the questions.**

**All questions carry equal marks.**

1. (a) Explain various methods used for the determination of moisture content in food preparations.

(12)

(b) Explain the determination of alcohol in beverages.

(5)

(c) Write notes on the principle, technique and modifications of Kjeldahl method and its use.

(8)

2. (a) What is Polensky value? How is it determined?

(b) How will you detect organophosphorous pesticide residue in food products?

(c) Explain the methods for the detection and determination of Arsenic in food products.

(d) What do you mean by chemical oxygen demand? How is it determined.

(5 + 5 + 8 + 7)

3. (a) Explain the Bureau of Indian standards specifications and testing methods for shampoos. (18)

(b) How will you evaluate antidandruff activity of antidandruff shampoo preparation. (7)

4. (a) Write briefly on the need for toxicity tests for cosmetics. Mention the toxicity tests performed for different cosmetics. (5)

(b) Give an account of the various methods for determining the fat content of milk. (12)

(c) What is aflatoxin? How is it detected in food products? (8)

## NOVEMBER 2001

[KE 302]

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch V — Pharmaceutical Analysis

Paper II — FOOD AND COSMETIC ANALYSIS

Time : Three hours

Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) Explain the difference between crude fibre and dietary fibres. How are they determined? (15)

(b) What are the modifications, suggested to the original kjeldahl method to suit various types of analytes. (3)

(c) What are the common adulterants in Tea? How are they detected? (7)

2. (a) How do you determine Reichert value, Polensky value and Kirshner value? Explain the interpretation of these values in assessing the quality of butter. (17)

(b) What is invert sugar? How will you detect invert sugar in Honey? Explain with principle and reactions. (4)

(c) What is cyanogen value? Explain the determination and significance of cyanogen value. (4)

3. (a) Classify the followings and explain the detection and determination of any one of them in each. (14)

(i) Preservatives.

(ii) Colouring agents.

(b) Explain the Bacteriological evaluation of potable water. (6)

(c) How will you detect pesticide residue in fruits. (5)

4. (a) Explain the specifications recommended by Bureau of Indian standards. For the following cosmetics and how are they determined.

(i) Face powder

(ii) Shampoo. (20)

(b) Explain the composition of the following cosmetics

(i) Hair dyes

(ii) After shave lotion. (5)

**[KH 302] SEPTEMBER 2002**

**M.Pharm. DEGREE EXAMINATION.**

**(Revised Regulations)**

**First Year**

**Branch V — Pharmaceutical Analysis**

**Paper II — FOOD AND COSMETIC ANALYSIS**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL the questions.**

**All questions carry equal marks.**

(a) Describe the salient features of Kjeldahl's method of estimation of protein content of paustik atta. (15)

(b) Write a note on rancidity of a fixed oil. (10)

B (a) How would you estimate alcohol content in beer and Wine? (10)

(b) Give test for evaluation of quality of fruits and vegetables by determining texture. (8)

(c) What are common adulterants in Tea? How are they detected? (7)

3. (a) Give methods for detection and determination of adulterants in fats and oils. (10)

(b) What are common adulterants of ground nut oil? (8)

(c) What is cyanogen value? Explain the determination and significance of cyanogen value. (7)

4. Explain the specifications recommendations by Bureau of Indian Standards, for the following cosmetics and how they are determined. (5 × 5)

(a) Hair dyes

(b) After Shave lotions

(c) Tooth paste

(d) Shampoo

(e) Face powder.

[KI 302]      APRIL 2003      Sub. Code : 1022

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch V — Pharmaceutical Analysis

Paper II — FOOD AND COSMETIC ANALYSIS

Time : Three hours

Maximum : 100 marks

Answer ALL questions

All questions carry equal marks.

1. Name the different preservatives used in food products. Describe any two methods for their determination. (25)

2. Write about the various adulterants and contaminants of ice creams. How are these adulterants and contaminants detected? (25)

3. (a) What are the various common adulterants in fruit products? How are they detected? (15)

(b) Describe one method for the determination of preservatives in canned fruits. (10)

4. Name and classify the different anti-oxidants used in food products. Describe the method for detection and quantitative determination of any two emulsifiers. (25)



OCTOBER 2003

[KJ 302]

Sub. Code : 1022

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch V — Pharmaceutical Analysis

Paper II — FOOD AND COSMETIC ANALYSIS

Time : Three hours

Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) Explain the methods for estimation of fat content, milk solids and stabilisers in ice-cream. (20)

(b) Write on quality control tests for honey. (5)

2. (a) Give methods for detection and determination of adulterants fats and oils. (10)

(b) Describe determination of dye content in carbonated drinks. (8)

(c) Explain methods for estimation of citric acid in citrus fruits. (7)

3. (a) Give the method of analysis of the following : (10)

(i) Caffeine in tea

(ii) Curcumin in turmeric.

(b) Discuss the common adulterants for the following products with their detectives in commercial samples : (10)

(i) soft drinks

(ii) coffee.

(c) Write a note on quality control of starch products. (5)

4. Explain the composition and preparation of the following cosmetics : (5 × 5)

(a) Shampoo.

(b) Face powder.

(c) Skin creams.

(d) Cologne.

(e) Nail polish.

[KK 302]      APRIL 2004      Sub. Code : 1022

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch V — Pharmaceutical Analysis

Paper II — FOOD AND COSMETIC ANALYSIS

Time : Three hours      Maximum : 100 marks

Sec. A & B : Two hours and      Sec. A & B : 80 marks  
forty minutes

M.C.Q. : Twenty minutes      M.C.Q. : 20 marks

Answer ALL the questions.

#### SECTION A

Long Essay :      (2 × 15 = 30)

1. Explain any two methods each for the estimation of the following :

(a) Proteins

(b) Starch

2. Explain the acceptance tests and type test for toothpaste as per BIS specification.

APRIL 2004

SECTION B

Short notes :

(10 × 5 = 50)

3. Define crude fibre and briefly explain its determination.
4. Define the following :
  - (a) Reichert value
  - (b) Polenske value
  - (c) Kirschner value.
5. What is Iodine value? Mention its significance and briefly explain any one method for the estimation of Iodine value?
6. Classify food preservatives with example and give brief account on estimation of any one of them.
7. How will you estimate lead in food product?
8. Write notes on the determination of "BOD" in effluent.
9. Explain the adhesion test and blush test for nail polish.
10. Write notes on the active detergent content estimation in synthetic detergent based shampoo as per BIS specification.

11. Explain the apparatus used and the technique for sampling of skin powder for analysis, during manufacture.

12. Name the hair cream types as per BIS classification. How will you determine the thermal stability of hair cream?

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**AUGUST 2004**  
**[KL 302] Sub. Code : 1022**

**M.Pharm. DEGREE EXAMINATION.**

**(Revised Regulations)**

**First Year**

**Branch V — Pharmaceutical Analysis**

**Paper II — FOOD AND COSMETIC ANALYSIS**

**Time : Three hours                      Maximum : 100 marks**

**Sec. A & B : Two hours and              Sec. A & B : 80 marks**  
**forty minutes**

**M.C.Q. : Twenty minutes              M.C.Q. : 20 marks**

**SECTION A — (2 × 15 = 30 marks)**

**Answer ALL questions.**

- 1. Write note on the various physical, chemical and microbiological analysis of water supplies. Discuss the BOD and COD analysis of effluents.**
- 2. Write in detail the physical, chemical and microbiological factors involved in the deterioration of food quality and spoilage.**

## AUGUST 2004

### SECTION B — (10 × 5 = 50 marks)

3. What are crude fibre and Dietary fibre? How the crude fibre is estimated?
4. List out the different tests carried out on the milk samples. Write notes on the determination of fat in milk.
5. Give examples of Inorganic and organic preservatives. Write on the determination of nitrates and nitrites.
6. Discuss the determination of volatile acids in butter fat. Write on the interpretation and use of R, P and K values.
7. List out the tests carried out on the skin powder for infants. Write about the test for Boric acid, and fineness.
8. Define Tooth paste. What are the tests carried out on toothpaste? Write on the determination of Foaming power.
9. Discuss the determination of active detergent content of a detergent based shampoo.
10. Give examples of Food colours. Discuss the General methods of their analysis.

11. What are edible oils? Give examples. What are the tests performed on them?

12. What are the duties of a Public Analyst and Food Inspector?
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