



AIKTC/KRRC/SoP/ACKN/QUES/2018-19/

Date: _____

School: SoP-CBCS

Branch: SoP

SEM: V

To,
 Exam Controller,
 AIKTC, New Panvel.

Dear Sir/Madam,

Received with thanks the following ^{✓ (A.T.K.T)} **Semester/Periodic** question papers from your exam cell:

Sr. No.	Subject Name	Subject Code	Format		No. of Copies
			SC	HC	
1	Organic Chemistry III	BPH_C_501_T			
2	Pharmaceutics II	BPH_C_502_T		✓	02
3	Pharmaceutical Biotechnology	BPH_C_503_T		✓	02
4	Pharmacology II	BPH_C_504_T		✓	02
5	Cosmetology			✓	02

Note: SC – Softecopy, HC - Hardcopy

(Shaheen Ansari)
 Librarian, AIKTC

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory
 2. Figures to the right indicate full marks.

- Q.1 Answer the following: (10)
- a) Give the regulatory requirements for manufacture of eye makeup products.
 - b) What are the factors governing formulation of baby products?
 - c) Enlist Nail speciality products
 - d) What are pearlescent pigments? Give examples.
 - e) What is the mechanism of working of hair conditioners?
 - f) Distinguish between antiperspirants and deodorants.
- Q.2 Answer any two (6)
- a) Vanishing creams are pearlescent and have a slightly acidic pH, Justify
 - b) Elaborate on colours used in cosmetics
 - c) Describe any two quality control tests on nail lacquers.
- Q.3 Answer any two (6)
- a) Describe the packaging of lipsticks.
 - b) Write a note on insect repellants.
 - c) Classify surfactants used in shampoos with examples
- Q.4 Answer any two (6)
- a) Write on large scale manufacturing of loose face powder.
 - b) Enlist various types of shaving products and elaborate on any one.
 - c) Give an account of raw materials used in toothpastes.
- Q.5 a) Elaborate on methods used for sensorial evaluation of cosmetics (3)
- b) Write 2 in-vitro tests for skin irritation. Discuss sensitivity testing of cosmetic products done on animals. (3)
- Q.6 a) Enlists various methods of processing of plant materials used in cosmetics. Explain any one process. (2)
- b) Illustrate the significance of sensorial evaluation for cosmetics. (2)
- c) Give the classification of different depilatory agents. (2)

18/4/19 sem - V CBCS

[Time: Three Hours]

[Marks:80]

Please check whether you have got the right question paper.

- N.B: 1. All questions are compulsory.
2. Figures to the right indicate full marks.

- Q.1 a) Define surface tension and comment on kinetic stability of dispersed systems. 03
b) Enlist quality evaluation tests for emulsions. 02
c) What are penetration enhancers and give two examples. 02
d) Write a note on Ointment bases. 03
e) Give the desirable features of suppositories. 02
f) Define Aerosols and give advantages of Aerosols. 03
g) Write a note on containers for Aerosol systems. 03
h) Classify cosmetics with suitable examples. 02
- Q.2 a) Give an account of excipients and additives used in Suspensions. 04
OR
Give the steps involved in large scale manufacturing of suspensions and elaborate on any one equipment. 04
b) Discuss in detail quality evaluation of semisolids. 04
c) Explain in detail manufacturing of Aerosols. 04
- Q.3 a) Elaborate on quality control of suspensions. 04
OR
Discuss in detail stress testing of emulsions. 04
b) Explain in detail methods to evaluate skin penetration. 03
c) Write on advantages and disadvantages of Cocoa butter as suppository base. 03
d) Justify use of antioxidants in cosmetics and give suitable examples. 02
- Q.4 a) Write a note on DLVO theory. 03
b) Elaborate on formulation additives in Emulsions. 04
c) Discuss the role of preservatives in semisolids. 02
d) Write a note on Sensorial evaluation of cosmetics. 03
- Q.5 a) Classify Emulsifiers in detail giving suitable examples. 03
b) Elaborate on rheological aspects of semisolids. 03
c) What are the different Aerosol formulation systems? Explain any one in detail. 03
OR
Discuss valves and actuators used in aerosols.
d) Write a note on BIS specifications for cosmetics. 03
- Q.6 a) Distinguish between flocculated and deflocculated systems. 03
b) Explain in detail quality control tests of suppositories. 04
c) Write a note on Dry Powder Inhalers. 03
d) Give two examples of Colours and Perfumes used in cosmetics. 02
OR
Enlist stability testing parameters of cosmetics. 02

27/4/19 Sem - I CBCS

(3 Hours)

Marks : 80

NB : (1) All questions are **Compulsory**.

(2) Draw neat labelled diagrams wherever necessary

- Q.1 a Explain mechanism of type I hypersensitivity 2
b Write any four approved biotech products 2
c Enlist advantages of biotransformation 2
d Define acquired artificial immunity using suitable example 2
e Write few applications of recombinant microbes in pharma industry 2
f Write the role of Sparger in fermentation 2
g Elaborate Yeast artificial chromosome vector with properties. 2
h Write significance of RFLP 2
i Applications of glucose oxidase biosensor 2
j Explain any two factors affecting pathogenicity 2
- Q.2 Write short notes on:
a Insulin production by r DNA method 4
b Polyacryl amide gel Entrapment methods 4
c Production of Hybridoma 4
- Q.3 a Distinguish between continuous and batch fermentation 4
b Explain production and purification of vitamin B12 4
c Write a note on BCG vaccine with Q.C aspects 4
- Or**
- Write a note on reactions involved in microbial biotransformation
- Q.4 a Write a note on clonal selection theory 4
b Explain structure of antibody using a suitable diagram 4
c Write a note on Immunodeficiency disorder 4
- Or**
- Write a note on autoimmune disorder
- Q.5 a Explain various steps involved in PCR using a diagram 4
b Write a note on southern blotting and its applications 4
c Explain methods of production of transgenic plants 4
- Or**
- Explain methods of production of transgenic animals
- Q.6 a Write a note on animal tissue culture and applications 4
b Enlist all vectors used in recombinant DNA technology and explain any one in detail 4
c Write a note on Applications of Bioinformatics 4
- Or**
- Write a note on Databases used in Bioinformatics and pairwise sequence alignment
-

(3 Hours)

Total marks: 80

- N.B. (1) All questions are **compulsory**
(2) Figures to the right indicate full marks.

Q.1 a) Answer the following:

5

1. Stable and heritable genetic change that occurs spontaneously and randomly among microorganism is called as
 - a. Mutation
 - b. Natural resistance
 - c. Acquired resistance.
 - d. Cross resistance.
2. Glucocorticoids are used in the following conditions except.....
 - a. Psoriasis
 - b. Hypertension
 - c. Asthma
 - d. Arthritis
3. Radioactive iodine is indicated in _____
 - a. Hypothyroidism
 - b. Hyperthyroidism
 - c. Addison's disease
 - d. None of the above
4. is a luminal anti-amoebic drug.
 - a. diloxanide furate
 - b. albendazole
 - c. mebendazole
 - d. neomycin
5. Anti-microbials that interfere with folate synthesis or action.
 - a. Sulphonamides
 - b. Macrolides
 - c. Beta lactam antibiotics
 - d. Quinolones.
6. The first line drugs for leprosy are _____
 - a. isoniazid and rifampin
 - b. dapsone, rifampin and clofazimine
 - c. rifampin, pyrazinamide and streptomycin
 - d. none of the above

- Q. 1 b) True or False and justify your answer: 10
1. Iron-dextran can be given by deep Intra muscular injection and slow intra venous infusion.
 2. Methicillin can be used to treat penicillinase producing staphylococcal infection.
 3. Retrovirus is a DNA virus.
 4. Nitrofurantoin damages bacterial DNA.
 5. Zidovudine is used to treat HIV infection.
- Q. 1 c) Match the following: 5
- | A | B |
|-----------------------|--------------------|
| 1. Nitrosoureas | a. Methotrexate |
| 2. Camptothecins | b. Melphalan |
| 3. Nitrogen mustards | c. Irinotecan |
| 4. Folate antagonists | d. Lomustine |
| 5. Anti metabolite | e. 5-Fluoro uracil |
- Q.2 a) Write notes on **any two** of the following: 8
- i) Chemotherapy of Amoebiasis.
 - ii) Classification of cephalosporins and pharmacology of fourth generation cephalosporins.
 - iii) Targets of anti-malarial drugs and indications, mechanism of action and adverse effects of Artesunate.
- Q.2 b) Answer **any one** of the following: 4
- i) Discuss first line therapy in tuberculosis.
 - ii) Use of Albendazole in treating helminth infestation.
- Q.3 a) Answer **any two** of the following: 8
- i) Short note on Glucocorticoid as immunosuppressant agents.
 - ii) DPP IV inhibitors in managing type 2 diabetes.
 - iii) Enlist clinical uses of anti-coagulants. Discuss injectable anti-coagulants.
- Q.3 b) Attempt **any one** of the following: 4
- i) Write a note on types of oral contraceptives.
 - ii) Discuss the pharmacological aspects of Bisphosphonates.
- Q.4 a) Answer **any two** of the following: 8
- i) Classify ant- coagulants. Discuss on direct thrombin inhibitors.
 - ii) Classify anti-platelet aggregation drugs. Add a note on aspirin.
 - iii) Discuss the physiological role of folic acid and its role in treatment of anaemia.
- Q.4 b) Write note on **any one**: 4
- i) Tissue plasminogen Activators
 - ii) Clinical uses of vitamin K

- Q.5 a) Answer **any two** of the following: 8
- i) Elaborate on the anti-metabolites used in cancer therapy.
 - ii) Classify antifungal drugs. Write a brief on amphotericin B.
 - iii) Discuss the pharmacology of protease inhibitors in anti viral therapy.
- Q.5 b) Write note on **any one**: 4
- i) Topical anti-fungal drugs
 - ii) Extended spectrum penicillins
- Q.6 a) Write notes on **any two** of the following: 8
- i) Classify Immunosuppressant drugs. Discuss on Calcineurin Inhibitors.
 - ii) Effect of insulin on carbohydrate, fat and protein metabolism.
 - iii) Discuss oxytocics.
- Q.6 b) Write note on **any one**: 4
- i) Chloramphenicol
 - ii) metformin
-