11/01/2022

Printing Pages :2

Paper Code: BP-601T A SVSU: 2021-22/

Enrollment No.

B. PHARM

III[rd] YEAR, VI SEMESTER (CARRYOVER)

MEDICINAL CHEMISTRY – III (BP601T)

[Time : 3:00 Hours] **[Max. Marks : 75]**

I Long Question: Answer Any Two **[10×2=20]**

1. Define QSAR with its application in drug designing.
2. Degradation of Cephalosorins in different medium.
3. Write down the structure with proper name of groups and ring.
   1. Penicillin 2. Cephalosporin 3. Tetracycline

II. Short Question: Answer any Seven **[5×7=35]**

1. Write structure and uses of Dapsone
2. Write structure and uses of Mebendazole
3. Discuss partition coefficient.
4. Discuss Hammet's electronic parameter.
5. Write structure and uses of Acyclovir
6. Explain Combinatorial Chemistry.
7. Write structure and uses of Griseofulvin
8. various approaches used in drug design.
9. Write structure and uses of Tolnaftate

III. Objectives Question: Answer All Question **[1×20=20]**

1. Pharmacophore modeling can be done by
   A) Ligand-based B) Structure-based C) both D) None of these
2. Method used in lead optimization is used to improve drug characteristics like
   A) Potency B) selectivity C) toxicity D) All of these
3. Sir Alexander Fleming discovered
   A) Cephalosporines B) Penicillin C) Aniline D) All
4. Beta lactam antibiotics are
   A) penicillin B) Cephalosporines C) Both D) None
5. Beta lactam is
   A) 2-membered ring B) 3-membered ring
   C) 4-membered ring D) 5-membered ring

6. The antibiotic penicillin is obtained from
   a.) fungus b.) bacteria c.) plant d.) None
7. What is bactericidal antibiotics?
   a.) To kill Bacteria b.) Inhibit the growth c.) Both d.) None
8. Chemdraw & Chemsketch used in drug design is a
   A). In vitro techniques B) in vivo techniques
   C) A software D) none of these
9. How many phases of clinical trial used in drug development?
   A). 4 phases B) 3 phases C) 2 phases D) 5 phases
10. thodused in lead optimization is used to improve drug characteristics like
   A) Potency B) selectivity C) toxicity D) All of these
11. On the basis of structural classification of macrolide, erythromycine is
   A)13 membered ring B)14membered ring
   C) 15 membered ring D)16 membered ring
12. On the basis of structural classification of macrolide, Azithromycin is
   A) 13 membered ring B) 14 membered ring C)15 membered ring D) 16 membered rings
13. Antibiotic chloramphenicol and clindamycin is inhibit
   A) protein synthesis B) nucleic acid synthesis C) cell wall synthesis D) none
14. ic use to kill
   A) Bacteria B) virus C) none D) both
15. expander Fleming have been discovered
   A.) Penicillin B) chloramphenicol C.) clindamycin D) erythromycin
16. crolide is the type of
   A.) antiviral dru B) antifungal drug C.) antibacterial drug D) none
17. Chloramphenicol is contained
   A) 1chiral center B) 3 chiral center C) 4 chiral center D) 2 chiral center
18. Quinine, which is obtained from cinchona bark is used as
   A) Antitubercular agent B) Anti-protozoal agent
   C) Anti-malarial agent D) Anti-fungal agent
19. Biological active form of chloramphenicol is
   A) Threo form B) Erythro form C) Both D) None
20. hh one of the, chloramphenicol prodrug example?
   A.) Chloramphenicol nitrate B) chloramphenicol sulphide
   C.) chloramphenicol succinate D) none

13/01/2022

Printing Pages :2

Paper Code: BP-602T (C SVSU: 2021-22/C)

Enrollment No. | | | | | | | | | | | | | |

B.PHARM

III[rd] YEAR, VI[th] SEMESTER, CARRYOVER EXAMINATION 2020-21

Subject Name: Pharmacology-III

Subject Code: BP-602T

[Time : 3:00 Hours] [Max. Marks : 75]

I. Multiple Choice Questions (MCQ) [1×20=20]

1. Secretion of HCL in stomach is due to stimulation of .....
   (a) Parietal Cells (b) Chief Cells (c) Mucous Cells (d) G- Cells
2. Which antibiotic acts by inhibiting cell wall synthesis?
   (a) Cefepime (b) Lomefloxacin (c) Erythromycin (d) Tetracycline
3. Tetracycline's are:
   (a) Broad spectrum antibiotic (b) Narrow spectrum antibiotic
   (c) Both a and b (d) none
4. Metoclopramide acts as...
   (a) D2 receptor antagonist (b) 5HT3 receptor antagonist
   (c) 5HT4 receptor agonist (d) All
5. Aminoglycosides have the following unwanted side effects:
   (a) Pancytopenia (b) Ototoxicity, Nephrotoxicity
   (c) Hepatotoxicity (d) Irritation of gastrointestinal mucosa
6. Bactericidal effect is:
   (a) Inhibition of bacterial cell division (b) Inhibition of young bacterial cell growth
   (c) Destroying of bacterial cells (d) Formation of bacterial cell membrane
7. Malaria is caused by
   (a) Plasmodium falciparum (b) Plasmodium vivax
   (c) Plasmodium malariae (d) All of the above
8. The hormone that is secreted to help with sleep is called
   (a) Dopamine (b) Melatonin (c) Serotonin (d) Progesterone
9. Pinpoint pupils (of the eyes) is observed in the following poisoning :
   (a) Belladonna poisoning (b) Morphine poisoning
   (c) Heavy metal poisoning (d) All of the above
10. Isoniazid has the following unwanted effect:
    (a) Cardiotoxicity (b) Hepatotoxicity and Peripheral neuropathy
    (c) Loss of hair (d) Immunotoxicity
11. Which one of the following is prostaglandins analogue?
    (a) Misoprostol (b) Pantoprazole (c) Propanthiline (d) Dopamine
12. Tetracycline's are:
    (a) Broad spectrum antibiotic (b) Narrow spectrum antibiotic
    (c) Both a and b (d) none
13. Choose the anticancer drug, a pyrimidine antagonist:
    (a) Fluorouracil (b) Mercaptopurine (c) Thioguanine (d) Methotrexate
14. Which of these is not an immunosuppressant drug?
    (a) Cyclosporine (b) Neomycin (c) Tacrolimus (d) Sirolimus
15. What do we call the substance that can stop vomiting?
    (a) Antihemolytic (b) Antibiotic (c) Antiseptic (d) Antiemetic

16. Most potent fluoroquinolone against Mycobacterium leprae is?
(a) Levofloxacin (b) Ofloxacin (c) Moxifloxacin (d) Ciprofloxacin
17. Which of the following drugs blocks opiate receptors?
(a) Haloperidol (b) Naloxone (c) Chlordiazpoxide (d) Phenobarbitone
18. The vaccine used to prevent tuberculosis is
(a) DPT vaccine (b) DT-DA (c) OPV (d) BCG
19. Following is the anticancer drug of plant origin:
(a) Dactinomycin (b) Vincristine (c) Methotrexate (d) Procarbazine
20. Which one of the following is β- lactamase inhibitor?
(a) Clavulanic acid (b) Sulbactum (c) Tazobactum (d) All

II. Long Answers (Answer 2 out of 3) **[10×2=20]**

1. Define Peptic Ulcer and write classification of anti ulcer drug with pharmacological action of any one class?
2. Write general principles of chemotherapy with pharmacological actions of cephalosporin class of antibiotics?
3. Classify anti cancer drugs and write MOA of Immunosuppressant.

III. Short Answers (Answer 7 out of 9) **[5×7=35]**

1. Write short note on drug Resistance?
2. Give the classification of ant-emetics drugs.
3. Write short notes on cotrimoxazole?
4. Give the classification of anti-asthmatic drugs and write the mechanism of salbutamol?
5. Enlist Drugs used in the management of COPD?
6. Write short notes on Emetics and anti-emetics?
7. What are β-lactum antibiotics, write MOA and therapeutic uses?
8. Write notes on anti-leprotic agents?
9. Write notes on Digestants and carminatives?

15/01/2022

Printing Pages : 2					
Paper Code : BP-603T A (SVSU:2021-22/R)					
Enrollment No.					

B.PHARM
III[rd] YEAR |(6[th] sem.) EXAMINATION
Herbal Drug Technology (BP-603T)

[Time : 3:00 Hours] **[Max. Marks : 75]**

Long question: Answer Any Two **[2x10=20]**

Q1. Define herbal medicinal. Write a note on herbal drug preparation and Good agricultural practices in cultivation of medicinal plants.

Q2. Give Introduction to Herbal Industry. Write a brief account of plant based industries involved in work on medicinal and aromatic plants in India

Q3. Define herbal Nutraceuticals. Write a note on Health benefits and role of Nutraceuticals in ailments like Diabetes and CVS diseases.

Short question: Answer Any Seven **[7x5=35]**

Q1. Write a short note on Good agricultural practices in cultivation of medicinal plants.

Q2. Write health benefits and role of Nutraceuticals in Diabetes.

Q3. Write a short note on garlic and amla as health food.

Q4. Give general introduction to herbal-drug and herb-food interactions.

Q5. Give the definition of: Patent, IPR and Biopiracy

Q6. Give a brief account of plant based industries.

Q7. Write the components of GMP (Schedule – T) and its objectives.

Q8. Write the preparation of ayurvedic formulation Aristas and Asawas.

Q9. Write a short note on Pest and Pest management in medicinal plants.

Objective Questions : Answer all question: **[20x1=20]**

Q1. Is Known as father of medicine?

a. Aristotle b. Dioscorides c. Hippocrates d. Galen

Q2. Cryopreservation is a technique used for

a. Crystallization of food c. Food packing

b. Seed saving d. Preservation of production of vegetables

SQ3. Which statement is true about synthetic drugs?

a. They can be patented

b. They are difficult to synthesize

c. They are usually more expensive to produce than natural sources

d. All of these

Q4. How much of the world's population depends on herbal medicines?

a. 80% b. 60% c. 40% d. 20%

Q5. The ph in soils can be raised by adding
a. Sand b. Sulphur c. Lime d. Nitrogen
Q6. Where is National Institute of Siddha located?
a. New Delhi b. Chennai c. Calicut d. Hyderabad
Q7. Who introduced the Unani system of medicine to India?
a. Chinese b. Arabs c. Japanese d. Portuguese
Q8. Name an ancient book which describes difficult surgical operations like opening of Sa brain etc.
a. Celsus b. Bhela Samhita c. Chivaravastu d. Agnivesa Samhita
Q9. All of the following are the components of foods except____
a. Carbohydrates b. Proteins c. Vitamins d. Fiber
Q10. Which of the following are the micronutrients?
a. Vitamins and Minerals c. Proteins and Vitamins
b. Carbohydrates and Fats d. Proteins and Minerals
Q11. What is the formula for glucose?
a. C6H12O6 b. C6H6O12 c. C6H6O6 d. C12H6O11
Q12. In which form body stores glucose?
a. Cellulose b. Starch c. Glycogen d. Carbon
Q13. Full form of FMHG
a. Fast Moving Horticulture Goods
b. Fast Moving Healthcare Gazed
c. Fast Moving Healthcare Goods
d. Flow Moving Healthcare Goods
Q14. Full form of DSHEA is
a. Daily Supplement Health and Education Act
b. Dietary Supplement Health and Education Act
c. Dietary supervision Health and Education Act
d. Dietary Supplement home and Education Act
Q15. Is defined as a food or part of a food that provides medical or health benefits, including the prevention and /or treatment of a disease.
a. Herbal Drug c. Nutraceutical
b. Herb Food d. Herbal Cosmetics
Q16. This can help on the diagnosis of the genetic basis of a disorder
a. ELISA b. PCR c. ABO blood group d. NMR
Q17. Which part of ginger is used in cooking or medicine?
a. Rhizome b. Leaf c. Flower d. Buds
Q18. Zinc pyrithine in shampoo is used as
a. Conditioner b. Cleansing c. Antidandruff agent d. Detergent
Q19. The following surfactant are used in the preparation of dental preparation
a. Tween80 b. Certitude c. Span 80 d. Sodium lauryl sulphate
Q20. Depilatories are substance which
a. Removes hair c. Imparts colour to the hair
b. Moisturizers skin d. Remove dirt from skin

18/01/2022

Printing Page(s) : 2 Paper Code : BP604T

(A) (SVSU:20-21/C)

Enrollment No. | | | | | | | | | | | | |

B.PHARM

III[RD] YEAR VI[TH] SEMESTER EXAMINATION

Biopharmaceutics & Pharmacokinetics) (BP604T)

[Time : 3:00 Hours] **[Max. Marks : 75]**

I. (MCQ) Attempt all questions. **[1x20=20]**

1. In cell membrane the hydrocarbon chains form hydrophilic phase and the polar heads form hydrophobic phase.
   a) True b) False
2. Proteins interact with which part of the cell membrane?
   a) Hydrophobic tail b) Polar head
   c) Non polar head d) Hydrophilic tail
3. Which part of the membrane is responsible for the relative impermeability of polar molecules in and out of the cell?
   a) Polar head b) Hydrophobic head
   c) Hydrophobic core d) Non polar head
4. What helps in the passing of inorganic ions?
   a) Ion channels b) Voltage gated channels
   c) Aqueous filled pores d) Diffusion
5. The cell membrane is _____ in nature.
   a) Impermeable b) Semipermeable
   c) Permeable d) Permeable to only gases
6. What is the major difference between Facilitated diffusion and Passive diffusion?
   a) Carrier-mediated transport b) Downhill transport
   c) Energy is used d) Inhibition by metabolic poisons
7. What influences the permeation of drugs in Ionic or Electrochemical diffusion?
   a) Charge on the membrane b) Charge on the particle
   c) Concentration gradient d) Equilibration of charge
8. Which kind of drugs are absorbed through endocytosis?
   a) Molecular weight ranging 100-400Dalton
   b) Water-soluble drugs
   c) Macromolecular drugs or drugs as oily droplets
   d) Polar drugs

9. Which drugs are absorbed through pore transport?
a) High lipophilicity b) Affinity for carriers
c) Oily droplets d) Hydrophilic drugs of mol.wt < 100 Dal

10. Which types of drugs get absorbed by ion-pair transport?
a) Drugs ionizing at all pH conditions b) Oily droplets
c) Affinity for carriers d) High lipophilicity

11. Which one of these is a physicochemical property of Drug substance?
a) Drug solubility b) Disintegration time
c) Age of patient d) Dissolution time

12. Which one of these does not come under a physicochemical property of drugs?
a) Drug solubility b) Disintegration time
c) Dissolution rate d) Drug stability

13. In the sequence of events in the drug absorption from orally administered solid dosage, which one comes at first?
a) Disintegration b) Deaggregation
c) Dissolution d) Absorption

14. The maximum amount of solute dissolved in a given solvent under standard conditions of temperature, pressure, and pH is known as _____
a) Dissolution rate b) Intrinsic dissolution
c) Rate limiting step d) Absolute solubility

15. In the equation, $V\ dC/dt = dm/dt = A(Cs-Cb).\sqrt{\gamma}\ D$, what does γ stands for?
a) Mass of solid dissolved b) Rate of surface renewal
c) Concentration of solute d) Concentration of the drug

16. Which one of these is not an example of hydrophilic diluents?
a) PVC b) Dextrose
c) PVP d) PEG

17. The solvate can exist in different crystalline forms called as _____
a) Solvates b) Pseudopolymorphs
c) Pseudopolymorphism d) Hydrate

18. Which form of a drug has greater solubility?
a) Anhydrous b) Hydrate
c) Crystallised d) Monohydrate

19. What is pH?
a) –ve log of H+ conc. b) +ve log of H+ conc.
c) Log of H+ conc. d) H+ conc.

20. Which one of these is not an advantage of buffered aspirin tablets?
a) Enhanced bioavailability b) Reduced gastric irritation
c) Increased stability d) Increased ulcerogenic tendency

II LONG ANSWER QUESTIONS [10x2=20]

Answer any two of the following-

(a) Discuss the physiochemical factors affecting drug absorption in detail.
(b) Write an exhaustive account on Bioequivalence experimental study design.
(c) Describe the determination of absorption rate constant by method of residuals.

III SHORT ANSWER QUESTIONS [5x7=35]

Answer any seven of the following-

(a) Volume of distribution
(b) Compartment models
(c) Significance of protein binding.
(d) Renal clearance
(e) Write a short note on Passive diffusion.
(f) Describe Wagner-Nelson method to determine pharmacokinetic parameters.
(g) Discuss the pharmacokinetic drug interaction with suitable examples.
(h) What is bioavailability? Explain absolute and relative bioavailability.
(i) Discuss in brief about dosing of patients with hepatic failure.

Pharmacy
ODD. Semester
********** Session:- 2021-2022
Total Pages:- 57

20/02/2022

Printing Page(s) : 3

Paper Code : BP-605T
(A) (SVSU:20-21/C)

Enrollment No. | | | | | | | | | | | | |

B.Pharm

III[rd] YEAR, VI[th] SEMESTER EXAMINATION

Pharmaceutical Biotechnology

[Time : 3:00 Hours] **[Max. Marks : 75]**

[20×1=20]

I. Multiple Choice Questions (MCQ)

1. Which of the following deals with biotechnology?
(a) Crop Production (b) Vaccination (c)Animal breeding (d)All

2. Which of the following product is biotechnologically derived?
(a) Bread (b)Cheese (c)Yogurt (d) All

3. Liposomes are used in which Method of Enzyme Immobilization?
(a) Adsorption (b) Covalent Binding (c) Membrane Confinement (d) All

4. The carrier Calcium Alginate is used in which method?
(a) Adsorption (b) Covalent Binding (c) Membrane Confinement (d)Entrapment

5. The sensitive biological material used in a Biosensor is known as-
(a) Amplifier (b)Processor (c)Sensor (d) None

6. Protein Engineering involves the change in the sequence of-
(a) DNA (b)Amino acids (c)Nucleic Acids (d) None

7. Microbial cells can be broken down by physical means in recovery stage of Enzymes by-
(a) Purification (b)Heating (c) Sonification (d) Radiation

8. The genes & the genetic code is present in-
(a)RNA (b)DNA (c)Mitochondria (d)Ribosomes

9. DNA Recombinant Technology is also known as-
(a) Chemical Engineering (b)Liquid Engineering
(c)Genetic Engineering (d)None

10. The information passed from DNA to mRNA is called as-
(a) Transcription (b)Translation (c)Both (d)None

11. Which of the following are produced using Genetic Engineering?(a) Insulin (b)Hepatitis B Vaccine (c)Rice (d)All

12.Joining pieces of DNA together is done by-
(a) Restriction Endonuclease (b) DNA Ligase (c) Vector (d) None

13. The immunity in which antibodies are gained from outside is known as-
(a) Natural (b) Passive (c) Both (d) None

14. The immunity which is due to activation of B-Cells is-
(a) Humoral (b) Cell Mediated (c)Both (d) None

15. Mutation may occur in-
(a) Initiators (b) Modulators (c) Mutagens (d)All

16. The agents which cause Mutation are known as-
(a) Form 12 (b) Form 12A (c)Form12AA (d)Form12B

17. Which of the following is used to generate useful products in Fermentation-
(a) Proteins (b) Microbes (c) Plants (d)Synthetic Chemicals

18. Fermenters are also known as-
(a) Bioreactors (b)Biomachines (c)Biogenerators (d)None

19. The freezing of dried human plasma in degree centigrade is done at-
(a) -2 (b) -6 (c) -12 (d) -18

20. Which of the following is an important example of Plasma Substitute-
(a) Lactose (b) Glucose (c) Dextran (d) Starch

II. Long Answers (Answer 2 out of 3) **[2×10=20]**

1. What do you mean by Enzyme Immobilization? Give its different mechanisms.

2. Write a note on DNA Recombinant Technology & its applications.

3. Give a brief account of Hypersensitivity reactions & its different types.

III. Short Answers (Answer 7 out of 9) **[7×5=35]**

1. Give the definition of Biotechnology. How it is applied in Pharmaceutical field?

2. What are Biosensors? What are their applications.

3. Write a note on-(a) Restriction Endonuclease (b) DNA Ligase

4. Give a brief account of PCR.

5. What do you mean by Immunity? Give its types.

6. Give a note on Blood Products & Plasma Substitutes.

7. What is mutation? Write about its different types.

8. Write a note on Fermentation. Also give its applications in industry.

9. Draw a well labeled diagram of an Industrial Fermentor and explain its working.

****

22/01/2022

Printing Pages : 3 **Paper Code – BP-606T** **(B) (SVSU:2020/21)**

Enrollment No.

B.Pharm
III YEAR,VI SEMESTER EXAMINATION
2020-2021(Carry over)
Subject - Quality Assurance,

[Time : 3:00 Hours] **[Max. Marks : 75]**

I. Multiple Choice Questions (MCQ) **[20×1=20]**

1. The chart used to monitor attributes is
a. Range chart b. Mean chart c. Pie chart d. All of these

2. Low cost, higher volume items requires
a. No inspection b. little inspection c. intensive inspection d. All of the these

3. Is it necessary to conduct on-going stability studies at a GMP certified laboratory?
a. No b. Yes c. Never d. Always

4. If a deviation occurs during manufacturing it should be
a. Accepted and ignored b. Approved in writing by competent person c. Both d. None

5. Significant amendments to the manufacturing process
a. Should be validated b. No need to be validated c. Both d. None

6. Records for raw materials should include
a. Name of supplier b. Supplier control number c.Identity and quantity of each shipment d. All

7. The procedure which is used to prove that the various production procedures, equipment and materials will produce accurate results is known as
a. GMP b. Product design c. Quality Control d. Validation

8. A basic requirement for Good Manufacturing Practice is:
a. Operators are trained to carry out procedures correctly b. Only basic training is required for operators c. No training is required d. None

9. ISO 9000 was first published in
a. 1987 b. 1957 c. 1989 d. 1982

10. Which one is a type of sampling?
a. Randomized b. Probability c. Cluster d. All

11. Raw materials in the storage area shall be labeled as
a. Designated name of the product b. Manufacturer's name, address and batch number:
c. Manufacturing date, expiry date and re-test date d. All

12. When did the current Code of GMP become mandatory?
a. 2011 b. 2009 c. 2010 d. 2003

13. Basic requirement for quality control is, when
a. Test methods are new b. Test methods are validated c. Both d. None

14. Should the scope and extent of validation be based on risk?
a. No b. Yes c. Never d. Always

15. Process control is carried out
a. before production b. during production c. after production control
d. All of the above

16. The head of QC has the responsibility to
a. Manufacturing b. Evaluate batch records c. Both d. None

17. The mean of sampling distribution is
a. less than mean of process distribution b. more than mean of process distribution
c. equal to mean of process distribution d. All of the above

18. The percent of the sample means will have values that are within ±3 standard deviations of the distribution mean is
a. 90 b. 97 c. 45 d. 99.7

19. The dividing lines between random and non random deviations from mean of the distribution are known as
a. upper control limit b. lower control limit c. control limit d. two sigma limit

20. Any alteration made to the entry on a document
a. No need to made b. Must be signed and dated c. Both d. None

II. Long Answers (Answer 2 out of 3) [2×10=20]

1. Discuss in detail WHO guidelines.
2. Discuss Process Validation and Validation of Equipments.
3. What are the sources of quality variations for raw material? How will you control these sources?

III. Short Answers (Answer 7 out of 9) [7×5=35]

1. What is the importance of sampling? What are the methods of sampling?
2. What are the procedure for validation of containers and closers?
3. Discuss in detail ISO 9000 series.
4. Discuss in detail about various documents prepared during validation of equipment.
5. Discuss in process quality control tests of Capsules.
6. Discuss in detail maintenance of records in pharmaceutical industry.
7. Discuss in detail various Quality Assurance Systems.
8. Write a note on Sampling and Operating Characteristics Curves.
9. What is the procedure for validation of analytical equipments?

****