

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY
2nd Semester of B. Pharm Examination
University Theory Examination October 2017
PH121 Pharmaceutical Biology-II

Date: 06/10/2017, Friday

Time: 10:00 am to 1:00 pm

Maximum Marks: 80

Instructions:

1. There are three sections in this question paper.
2. SECTION – I comprises of Question 1. Total marks for Section 1 are 20. There are 20 sub-questions (MCQ type). Answers to SECTION – I are to be given in Answer Sheet for MCQ type questions provided to you. Maximum time allotted for SECTION – I is 30 minutes. Answers to SECTION – I must be written during the first 30 minutes of the examination.
3. Answers to SECTION – II and SECTION – III are to be provided in separate Main Answer Books provided to you.
4. Figures to right indicate marks.
5. Draw neat labeled sketches wherever necessary.

SECTION - I

- Q-1 Attempt all questions. Each question is of one mark. 20**
1. Deficiency of Vitamin A causes
[A] Osteoporosis
[B] Xerophthalmia
[C] Scurvy
[D] Rickets
 2. In structure of DNA , organic base A refers to
[A] Adenine
[B] Adrenaline
[C] Adenosine
[D] Adiponitrile
 3. Process in which DNA copies itself to produce daughter DNA molecule is
[A] Translation
[B] Transcription
[C] Replication
[D] DNA repair
 4. Hormones that regulate renal Na and Cl reabsorption are
[A] Angiotensin-II
[B] Follicle stimulating hormone
[C] Leutilizing hormone
[D] Progesterone
 5. Separation of two strands of DNA results in formation of
[A] Replication fork
[B] Replication bubble
[C] Primer
[D] Supercoiling
 6. One of the the following is micro mineral
[A] Fe
[B] Ca
[C] P
[D] K

7. Which organ has largest single mass of lymphatic tissue?
[A] kidney
[B] Red bone marrow
[C] Spleen
[D] Thymus
8. When water loss is greater than water gain, condition is called as
[A] Sweating
[B] Dehydration
[C] Diarrhoea
[D] All of above
9. The two strands in a DNA is joined by
[A] Co-valent bond
[B] Hydrogen bond
[C] ionic bond
[D] phosphodiester bond
10. Which one is fat soluble vitamin?
[A] Vitamin H
[B] Vitamin A
[C] Vitamin B12
[D] Vitamin C
11. Formation of protein from m-RNA is
[A] Translation
[B] Transcription
[C] Replication
[D] DNA repair
12. Formation of phosphodiester linkage is catalysed by
[A] DNA helicase
[B] DNA polymerase
[C] RNA polymerase
[D] DNA ligase
13. Source of vitamin D is
[A] Green vegetables
[B] Fish oil
[C] Microbes
[D] UV rays
14. Synthesis of new DNA strand occurs in
[A] 5 prime to 3 prime
[B] 3prime to 5 prime
[C] 3prime to 3 prime
[D] 5 prime to 5 prime
15. Following is not a stop codon in translation
[A] UAA
[B] UAG
[C] UGA
[D] UGG
16. Which antibody is most abundant in blood?
[A] IgM
[B] IgG
[C] IgD
[D] IgA
17. Genetic engineering primarily involves the manipulation of genetic material
[A] Protein
[B] Chromosome
[C] DNA
[D] RNA

18. Unit of gene is
 [A] Genome
 [B] DNA
 [C] Chromosome
 [D] None of the above
19. Codon AUG codes for synthesis of
 [A] Cysteine
 [B] Methionine
 [C] Aspartic acid
 [D] Arginine
20. Chyle is
 [A] Lymph with protein
 [B] Lymph with lipids
 [C] Lymph with carbohydrate
 [D] Lymph with blood

SECTION-II

Q-2 Attempt any TWO of the following:

- A Prepare a note on water gain and water loss. 05
- B Write about role of polymerase enzyme in DNA replication and transcription. 05
- C Prepare a note on Nucleotide and nucleoside. 05

Q-3 Attempt any TWO of the following:

- A What is inflammation? Write about different stages involved in process of inflammation. 05
- B Make a note on DNA replication. 05
- C Define and classify vitamins. Prepare a note on vitamin A. 05

SECTION-III

Q-4 Attempt any FOUR of the following:

- A Explain compositions, formation, circulation and functions of lymph. 05
- B Differentiate cell mediated and humoral immunity. 05
- C Classify body fluids. Explain compositions and functions of intracellular fluids. 05
- D Classify the minerals and trace elements. Explain brief note on any two minerals. 05
- E Explain the important of genetical recombinant technique on human body. 05
- F Enlist the comminicable disease. Write short note on Sexually Transmitted Diseases. 05

- Q-5 Attempt any FOUR of the following:
- A Explain any one water soluble vitamin in detail. 05
 - B Classify types of immunity. Explain T- Cell mediated immunity. 05
 - C Explain detail process of DNA translation. 05
 - D Explain the role of RNA polymerase, topoisomer, DNA ligase and DNA Helicase. 05
 - E Define: 1) immunity 2) DNA 3) dehydration 4) Translation 5) Genetic engineering 05
 - F Draw the neat and labeled diagram of any one secondary organ of lymph and write their functions. 05