R–3073

Sub. Code
508201

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Biomedical Sciences

ANATOMY AND PHYSIOLOGY

(CBCS – 2018 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is Microvilli?
2. Define Phagocytosis.
3. State systolic blood pressure.
4. Draw the structure of nerve cell with labelling.
5. What is respiratory minute volume?
6. Define Hypoxia.
7. List out the gastric enzymes.
8. What is glomerulus?
9. What is rhodopsin?
10. What is cochlea?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write a note on composition of blood.

Or

(b) Discuss hemopoiesis process of blood cells.

12. (a) Describe the measurement of ECG.

Or

(b) Explain the structure of nervous system.

13. (a) Discuss about exchange of gases and their regulation.

Or

(b) Explain the structure of lungs with diagram.

14. (a) Write a short note on structure of Kidney.

Or

(b) Discuss how the body temperature is regulated?

15. (a) Explain in detail Photochemistry vision.

Or

(b) Write a note on hearing test.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Write a note on the structure of cell and functions of cell organelles.

17. What is blood pressure? Explain feedback control of blood pressure.

18. Explain the structure of respiratory system with neat diagram.

19. Explain in detail about the physiology of urine formation.

20. Discuss in detail about internal structure of ear.

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R–3074

Sub. Code
508202

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Biomedical Science

MEDICAL GENETICS

(CBCS – 2018 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. James Neel
2. Eugenics
3. Karyotype
4. FISH
5. Albinism
6. Phenylketonuria
7. Pharmacodynamics
8. Drug metabolism
9. Mutation
10. Sickle cell anemia.

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write a short notes on Pedigree symbols.

Or

(b) Write a notes on foetal wastage.

12. (a) What are the techniques involved in human chromosome analysis?

Or

(b) Explain the pathology of human chromosome.

13. (a) Comment on maple syrup urine disease.

Or

(b) Explain briefly about galactosemia.

14. (a) Explain the effects of drugs in genetical variation.

Or

(b) Give an account on drug metabolism.

15. (a) Write about human mitochondrial diseases.

Or

(b) Write a notes on collagens diseases.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Describe in detail about the history of human genetics.

17. Write an essay on chromosomal aberration.

18. Give an account on Inborn errors of metabolism and explain any two disorders.

19. Explain the significant features of laboratory animal models in pharmacogenomics.

20. Explain the loss of function and gain of functional mutations in humans.

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R–3075

Sub. Code
508203

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Biomedical Science

CLINICAL PATHOLOGY

(CBCS – 2018 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** the questions.

All questions carry equal marks

1. F.N.A.C
2. Fixation
3. Rh typing
4. PCV
5. Ketone bodies
6. Bile pigments
7. Electrophoresis
8. Autoanalyzer
9. Widal test
10. ELISA

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks

11. (a) Write a short note on immunohistochemistry.

Or

(b) Give a brief account on Autopsy.

12. (a) Give a brief account on haemorrhaegic disorders.

Or

(b) Write a note on lupus erythematosus cell preparation.

13. (a) Write a note on microscopic analysis of crystals.

Or

(b) Discuss about physical and chemical examination of urine.

14. (a) Illustrate the principle, procedure and application of colorimeter.

Or

(b) Explain the procedure involved in col1ection and processing of blood.

15. (a) Discuss on different culture media in microbial analysis.

Or

(b) Write a short note on antibiotic sensitivity test.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Discuss about immunocytochemistry and its applications.

17. Explain the diagnostic investigations in transfusion reactions.

18. Elaborate on microscopic and biochemical analysis of semen.

19. Write a note on anti coagulants.

20. Outline the methods of diagnosis of viral infections.

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R–3076

Sub. Code
508502

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Biomedical Science

HOSPITAL MANAGEMENT AND BIOSAFETY

(CBCS – 2018 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Performance management.
2. Personal health records.
3. Class I Biosafety cabinets
4. Legal requirements for Hospitals
5. Factors determining the site of Hospital construction
6. Need based survey in community
7. Medical ethics
8. Genetically modified crops
9. Bio safety
10. Incineration

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the importance of Hospital management.

Or

(b) Write about different bodies of hospital management.

12. (a) Explain operation concept using models.

Or

(b) Write briefly on formalized managerial methods.

13. (a) How will you plan the hospital building?

Or

(b) Write a note on hospital functionaries.

14. (a) Write a account on quality assured services of hospital.

Or

(b) Write about the different bodies of management.

15. (a) Write briefly on the regulatory frame work for GMOs.

Or

(b) Write about bioethics and its socio economic impact.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Write an essay on epidemiological basis for healthcare management.

17. Give an detailed account O_2 management of Indian hospital.

18. Write a detailed account on the guiding principles in the planning of hospital facilities.

19. Explain in detail about the organization of hospitals.

20. Explain the concept of Hospital waste management.

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