

B.Sc.(FS) Semester - 5 (CBCS) Examination**Oct/Nov. - 2018****FORENSIC BIOLOGY, SEROLOGY AND ANTHROPOLOGY (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Q-1 Give the answer of following questions. (14)**
- (A) Answer the following question very shortly (any four) (04)
- (1) State the difference between secretor and non secretor.
 - (2) State the name of the component responsible for smell and flavor in semen.
 - (3) Define Vomit.
 - (4) Who showed ESD for the 1st time?
 - (5) What is cerumen?
- (B) Shortly answer any one question (03)
- (1) Function of urine.
 - (2) Give the Composition of saliva
- (C) Answer any one question in detail (07)
- (1) Starch iodine and radial diffusion test for saliva.
 - (2) Species origin test for blood.
- Q-2 Give the answer of following questions. (14)**
- (A) Answer the following question very shortly (any four) (04)
- (1) Give the full name of STR.
 - (2) Give the full name of RFLP.
 - (3) Give the example of isoenzymes.
 - (4) Which instrumentation technique is used for amplification of DNA?
 - (5) Which base pairs are there in DNA?
- (B) Shortly answer any one question (03)
- (1) Define: Molecular markers and give its types.
 - (2) Write the analysis technique of RFLP.
- (C) Answer any one question in detail (07)
- (1) Write a note on electrophoresis technique.
 - (2) Write a note on STR.
- Q-3 Give the answer of following questions. (14)**
- (A) Answer the following question very shortly (any four) (04)
- (1) Define enzymes.
 - (2) What is holoenzyme?
 - (3) The protein part of enzyme is known as _____.
 - (4) Km value of an enzyme is the substrate concentration at which the reaction attain.
 - (5) The enzyme which forms the peptide bonds is known as _____.
- (B) Shortly answer any one question (03)
- (1) Give the classification of enzymes.
 - (2) Describe any one method for protein estimation.
- (C) Answer any one question in detail (07)
- (1) Discuss action mechanism of enzymes.
 - (2) Discuss enzyme kinetics.
- Q-4 Give the answer of following questions. (14)**
- (A) Answer the following question very shortly (any four) (04)
- (1) Give the types of diatoms.
 - (2) What is called the fingerprint of plants?
 - (3) Cell wall of diatom is made up of _____.
 - (4) What is WPA 1972?
 - (5) From which plant Anti H lectin is prepared?

- (B) Shortly answer any one question (03)
- (1) Give the application of Forensic Entomology.
 - (2) Discuss different methods of poaching and killing of wild life.
- (C) Answer any one question in detail (07)
- (1) Draw structure of hair and Differentiate Animal and Human hair
 - (2) State the morphological and anatomical characters of Opium and Cannabis.
- Q-5 Give the answer of following questions. (14)**
- (A) Answer the following question very shortly (any four) (04)
- (1) How many thoracic vertebrae are there in human?
 - (2) Give the dental formula of Adult male.
 - (3) What is enamel?
 - (4) Give the types of human teeth?
 - (5) How many bones are there in human body?
- (B) Shortly answer any one question (03)
- (1) Discuss the teeth diseases and its significance in personal identification.
 - (2) Discuss importance of forensic Anthropology.
- (C) Answer any one question in detail (07)
- (1) Use Karl Pearson's formula (i) Femur bone length = 45 cm (ii) Tibia bone length = 32 cm. find the stature of the person.
 - (2) How is sex determination from skeletal remains done by general appearance and skull?
