

MCP-003-001546

Seat No.

B. Sc. (Forensic Science) (Sem. V) (CBCS) Examination May / June - 2018

FS - 501: Forensic Biology, Serology & Anthropology

Faculty Code: 003

Subject Code: 001546

Time : $2\frac{1}{2}$ Hours]

[Total Marks: 70

Instructions: (1) This question paper contains three questions.

- (2) All are compulsory.
- (3) Draw neat and labeled diagrams wherever necessary.
- (4) Figure to the right indicate marks.
- 1 Give the answer of following questions-one mark each: 20
 - (1) Difference between secretor and non secretor?
 - (2) Greenish vomit is due to disease.
 - (3) Which body fluid is the forceful expulsion of stomach contents from mouth?
 - (4) Give the example of body fluids.
 - (5) What is the molecular weight of PSA?
 - (6) Pigmentation in human hair is more towards periphery. Is it true?
 - (7) Give the types of fiber.
 - (8) Give the types of diatoms.
 - (9) What is WPA 1972?
 - (10) In forward method what is the blood group when agglutination in A cavity is positive and in B cavity is negative?
 - (11) Give the full name of STR.
 - (12) Which base pairs are there in DNA?
 - (13) What is the function of PCR?
 - (14) Define bruise.

| | (15) | Give | e the dental formula of Human child. | |
|----------------------|------|---|--|----|
| (16) What is enamel? | | | | |
| | (17) | (17) What is the cranial capacity of male?(18) What is injury?(19) How many cervical vertebrae are there in human | | |
| | (18) | | | |
| | (19) | | | |
| | | skel | eton? | |
| | (20) | (0) Give the name of the longest bone of the human body. | | |
| | Give | Give the answers of following questions as per instruction (A) Write any three out of six : | | |
| | (A) | | | |
| | | (1) | Name the types of Body Fluids with 2 examples. | |
| | | (2) | Composition of Urine. | |
| | | (3) | Define: Vomit and Nausea | |
| | | (4) | Give the only name for the forensic analysis of semen. | |
| | | (5) | What is Forensic Entomology? | |
| | | (6) | Draw a Morphological diagram of hair. | |
| | (B) | Write any three out of six: | | |
| | | (1) | Describe the urea nitrate crystal and creatinine test for urine | |
| | | (2) | Define saliva, give its characteristics, composition and name the glands secreting saliva. | |
| | | (3) | Define vomit and function and causes of vomit. | |
| | | (4) | What is the function of prostate gland and bulbo urethral gland? | |
| | | (5) | Explain the features of diatoms and its coloration. | |
| | | (6) | Which micrometry measurements can be done | |
| | | | from hair? | |
| | (C) | Wri | te any two out of five: | 10 |
| | | (1) | Starch iodine and radial diffusion test for saliva. | |
| | | 4 - 4 | | |

- (2) Explain the confirmatory test for semen stains.
- (3) Draw structure of hair and Differentiate Animal and Human hair.
- (4) Brief introduction of diatoms and its forensic significance.
- (5) Give the classification chart of fibers.

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Give the answers of following questions as per instruction: 3 (A) Write any three out of six: 6 Define: Injury and classify it. (1)(2)What findings will you notes in a typical hanging case? (2 points) Classify Serum proteins. (3)Name the grouping methods of fresh blood. (4) Types of hanging. (5)(6)Give the name of isoenzymes. Write any three out of six: What is the principle behind absorption-inhibition method? (2) Define: Molecular markers and give its types. Draw a chart table of eruption of temporary teeth. (3)Give main features of lacerations. What are the PM appearances in lightening (5)death? Give the formula of Karl Pearson from wet bone (6) of female and male. Write any two out of five: 10 How does PCR works? (1) (2)Give the classification of injuries. (3)Write a note on isoenzymes. Species origin test for blood. (4) Explain Drowning. (5)