

SEAT No. _____

[51]

No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY
M.Sc. (Forensic Science) Semester - III
Thursday, 02 November, 2017
PSO3CFSC01 : Forensic Physics

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Time: - 2:00 pm - 5:00 PM

Total marks - 70

Note: Answer of all the questions (including multiple choice questions) should be written in the provided answer book only.

Instructions:

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

Q-1 Multiple Choice Questions:

(8)

1. The 3-R rule stands for _____.
a) Radial fracture are at right angle at the rare side of impact.
b) Radial fracture are at right angle at the opposite to rare side of impact.
c) Ridgeline on radial fracture are at right angle .
d) All of above
2. The Particle size of sand is _____.
a) 0.005-2mm
b) 0.05-2mm
c) 0.5-2mm
d) 5.0-2mm
3. Which component is used as a hiding pigment?
a) SiO₂
b) TiO₂
c) CaCO₃
d) FeO₂
4. A single length of fiber consisting of material twisted together to form a thin length is called _____.
a) Fiber
b) Rope
c) Strings
d) Cable
5. Which of the following material is not used in casting?
a) Dental material
b) POP
c) Wood metal
d) none of above
6. PPC is an abbreviation of _____.
a) Portland pozzuolana cement
b) Pozzuolana Portland cement
c) Pozzuolent portland cement
d) Portland plaster cement
7. The Passage between the two horizontal folds of elastic muscular tissues is called _____.
a) Larynx
b) Pharynx
c) Glottis
d) Epiglottis
8. What is the ratio of speaker identification?
a) 1:1
b) 1:10
c) 1:100
d) 1:n

Q-2 Answer in Brief: (Any 7)

(14)

- 1) Define glass along with its ingredients.
- 2) Explain curvature in terms of glass.
- 3) Give the importance of tool marks as an evidence.
- 4) What do you mean by foot angle and principle angle?
- 5) Define electrolytic etching in terms of restoration.
- 6) Describe any two types of skid marks found at crime scene.
- 7) Define voice & speech.
- 8) Elaborate about speech recognition.
- 9) Justify: why soil varies at different places.

Q-3 (A) Define glass and explain types of glass fractures.

(06)

(B) Explain soil profile with its significance in forensic science.

(06)

OR

(B) Write a short note on soil examination.

(06)

Q-4 (A) Give the examination of seal.

(06)

(B) Write a short note on examination of tool marks.

(06)

OR

(B) Define chieloscopy and give the classifications of lip print.

(06)

Q-5 (A) Write a short note on cement.

(06)

(B) Explain the types of obliteration marks.

(06)

OR

(B) What is restoration and explain the types of restoration methods.

(06)

Q-6 (A) Describe digitalization of voice and its importance in forensic science.

(06)

(B) (i) Explain text dependent and text independent in terms of voice

(03)

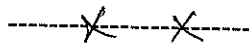
(ii) Write a note on inter speaker and intra speaker of voice

(03)

OR

(B) Explain Acoustic theory.

(06)



SEAT No. _____

[45]

No of printed pages:02

SARDAR PATEL UNIVERSITY
M.Sc. (Forensic Science) Semester-III
External Examination
Monday, 6th November-2017
Subject Code- PS03CFSC02

Subject: Forensic Toxicology and Forensic Pharmacology and Forensic Serology
Time- 02:00 pm – 05:00 pm **Total marks: 70**

Q-1 Multiple Choice Questions:**(8)**

1. Poison that gets accumulated in organs and tissues are known as _____ poison
 - a) Stored
 - b) Cumulative
 - c) Processed
 - d) Controlled
2. Sea snakes fall under the sub family known as _____
 - a) Hydrophiinae
 - b) Boidea
 - c) Viperidae
 - d) None of the above
3. Antimony is a type of a _____ poison
 - a) Metallic
 - b) Non Metallic
 - c) Vaporised
 - d) None of the above
4. Abrus Precatorius contains the toxalbumin known as _____
 - a) Abrin
 - b) Calbrin
 - c) Febin
 - d) Ubrin
5. In regard to oestradiol, Oxytetracycline is considered as an _____
 - a) Analogue
 - b) Prologue
 - c) Dialogue
 - d) None of the above
6. Drug Metabolism mostly occurs in _____
 - a) Pancreas
 - b) Heart
 - c) Stomach
 - d) Liver
7. Anti- H lectin is derived from the plant _____ seed
 - a) Ulex europaeus
 - b) Vilex eurpaeus
 - c) Felix europaeus
 - d) Rolex europaeus
8. Blood Groups are inherited as per _____ principles.
 - a) Mendelian
 - b) Mandolian
 - c) Mongolian
 - d) Multimedian

Q-2 Answer in Brief: (Any Seven) (14)

- 1) What are the various classifications of poison as per nature of use?
- 2) Define Antivenin?
- 3) What happens post bite in case of Scorpion Bite?
- 4) What is Ion Chromatography?
- 5) Explain the HPLC.
- 6) Define Bio Transformation.
- 7) Explain Entero-Hepatic Changes.
- 8) Elaborate the confirmatory test for the presence of blood.
- 9) What do you understand by Bombay Blood Group?

Q-3 (A) A person named Joel, is suspected to have died of Mercury Poisoning. File a lab report describing the findings as per Post Mortem findings. (06)

(B) Elaborate the sources, symptoms of Arsenic Poisoning (06)

OR

(B) (i) State the features of Poisonous Snakes (03)

(ii) Discuss any two toxicity tests for Snake Venom. (03)

Q-4 (A) Elaborate about Micellar Extraction (06)

(B) (i) Define Distillation and state its types. (03)

(ii) Explain Solvent Extraction. (03)

OR

(B) What do you understand by Solid Phase Extraction (06)

Q-5 (A) Explain Bio Transformation of Drug in detail (06)

(B) (i) How does the Individual Variations in Metabolism impact the Drug Interaction in Human Body? (03)

(ii) Define: Derivatization and its types. (03)

OR

(B) Write short on Absorption, Distribution Factors and Biotransformation of Drugs (06)

Q-6 (A) How would you collect Vomit from the Scene of Crime and analyze it? (06)

(B) (i) Explain DNA profiling and Mention the types of Molecular Marker. (03)

(ii) Write a note on Lewis Blood Type (03)

OR

(B) (i) What happens in case of Rh incompatibility during Pregnancy (03)

(ii) Write a short note on Iso-enzyme and its forensic importance (03)

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(119)

SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY
M.Sc. (Forensic Science) Semester III- Examination
Subject Code- PS03CFSC03
Subject: FORENSIC MEDICINE

DATE-08/11/2017
 WEDNESDAY

TIME-2:00pm-5:00pm
 TOTAL MARKS- 70

Q1. Multiple choice questions:**[8]**

- 1.) The destruction of the superficial epithelial covering of skin (epidermis) due to impact with rough and hard object is known as..... .

a) Abrasion	b) Laceration
c) Bruises	d) Wound
- 2.) The "Stab wound" is also known as..... .

a) Stretch wound	b) Punctured wound
c) Cut wound	d) Scratch wound
- 3.) The unicellular algae with inert silicon coating is known as

a) Diatom	b) Silicon atom
c) Triatom	d) Red algae
- 4.) When the neck is compressed between two bamboo sticks, it is called as

a) Throttling	b) Mugging
c) Suffocation	d) Bansdolla
- 5.) The failure of circulatory system is termed as

a) Coma	b) Asphyxia
c) Syncope	d) Dyspnoea
- 6.) Length of Tibia/length of Femur*100 formula is for

a) Cephalic index	b) Crural index
c) Brachial index	d) Dolico cephalic
- 7.) The authorized digging out of a buried dead body from the grave is known as...

a) Extortion	b) Exhumation
c) Burring	d) Café caronary
- 8.) The top portion of tooth covered by enamel is known as.....

a) Cementum	b) Enamel
b) Crown	d) Dentine

Q2. Answer in Brief: (any 7)**[14]**

- 1) Explain "Gutter Fracture".
- 2) Define Bruises and explain its features.
- 3) Explain the term "judicial hanging" .
- 4) Write down the medicolegal definition of death.

①

(P.T.O.)

- 5) What do you mean by "Choking".
- 6) Explain the postmortem staining phenomenon.
- 7) Explain the features of periodontosis diseases.
- 8) Write a list of different racial group.
- 9) Define osteometry and name the instruments used for measurement of bones.

Q3[A] Write a detail note on Abrasion. [6]

[B] Write in detail about different types of skull fractures. [6]

OR

[B] Write a note on Wilson's modified method of burn injury. [6]

Q4[A] Write a short note on "Starvation". [6]

[B] Define Hanging, its types and its postmortem appearance. [6]

OR

[B] Explain in detail about signs of "Live birth" in detail. [6]

Q5[A] Write a note on changes after death. [6]

[B] Write down the rules for Postmortem examination. [6]

OR

[B] Write a note on Sexual Offences and explain any one. [6]

Q6[A] Draw the structure of teeth and explain various diseases of teeth. [6]

[B] Classify Human Skeletal System. [6]

OR

[B] Write down the sex determination features from skull. [6]

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(116)

SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

M.Sc. (Forensic Science) Semester-III- Examination

PS03EFSC01: Teaching and Research Aptitude & Quality Management

Date: 10/11/2017

Time: 02:00pm-05:00 pm

Day: Friday

Total marks: 70

Q-1 Multiple Choice Questions:

(08)

1. IEC stands for _____
(A) International electro-technical commission
(B) International E-learning commission
(C) International electro-technical committee
(D) International effective commission
2. _____ is outside the scope of ISO criteria.
(A) Health & safety requirements (B) Calibration of Instrument's
(C) Certification (D) Guidance
3. APLAC Stands for...
(A) Asia Pacific Laboratory Accreditation Cooperation
(B) Asia Pacific Laboratory Accreditation Cooperation
(C) Asia Provide Laboratory According Committee
(D) America Particular Laboratory Accreditation Cooperation
4. Ethical norms in research do NOT involve guidelines for .
(A) Data sharing Policies (B) Copyright
(C) Thesis Format (D) Patenting policy
5. "Male & female students perform equally well in a numerical aptitude test". This statement indicates a
(A) Null hypothesis (B) directional hypothesis
(C) Statistical hypothesis (D) research hypothesis
6. Which of the following organizations deals with 'capacity building program' on education planning?
(A) NCERT (B) UGC
(C) NAAC (D) NUEPA
7. The research stream of immediate application is
(A) Conceptual research (B) Fundamental research
(C) Action research (D) Empirical research
8. The sequential operations in scientific research are
(A) Co-variation, Elimination of Spurious Relations, Generalisation, Theorisation
(B) Generalisation, Co-Variation, Theorisation, Elimination of Spurious Relations
(C) Theorisation, Generalisation, Elimination of Spurious Relations, Co-variation
(D) Elimination of Spurious Relations, Theorisation, Generalisation, Co-variation

(P.T.O.)

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Q-2 Answer in Brief: (Attempt any 7)

(14)

- 1) Define cross- examination.
- 2) Write a short notes on Subcontracting of Calibration or Testing.
- 3) Define accommodation.
- 4) Write down the Preventive action taken in Laboratory.
- 5) Write characteristics of good teaching.
- 6) Write a short notes on Evaluation systems.
- 7) What do you mean by Fundamental research?
- 8) Explain non-directional hypothesis
- 9) Define Research and mention some Important Research lab situated in India for Forensic Science Field.

Q-3(A) Write down the Information that should be included in report writing. (06)

(B) Write in detail about Quality system, Audit and Review done at CFSL. (06)

OR

(B) Explain Ethics in Forensic science and its dilemma's. (06)

Q-4 (A) Explain Handling of Calibration and test items (06)

(B) Explain Measurement Traceability and calibration. (06)

OR

(B) What are the point one should keep in mind for opening new Laboratory. (06)

Q-5(A) Explain Principle, Classification and Importance of audio-visual Aids (06)

(B) Explain Teaching methods and its types. (06)

OR

(B) Explain in details about teaching skill according to Allen & Ryan. (06)

Q-6 (A) Explain Research Ethics. (06)

(B) Define workshop and write its objectives, characteristic and limitations. (06)

OR

(B) Write down the research requirements in details. (06)

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(2)