

ROLL NO _____

M.SC. (FORENSIC SCIENCE)- 2ND SEMESTER EXAMINATIONS, JUNE 2018
(SUBJECT: BASICS OF QUESTIONED DOCUMENT EXAMINATION; PAPER CODE: 05180201)

Time: 03:00 Hrs.

Max Mark:60

Instructions:

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with the correct question paper. Complaints in this regards, If any, should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. Each Part is Compulsory. Marks are indicated against each question.
4. Draw the diagram wherever required.

PART-A (OBJECTIVE TYPE QUESTIONS OMR SHEETS)

Attempt all questions.

(30x1=30)

Q.1 Which of the following is NOT a characteristic of handwriting analysis?

- | | |
|-----------------|-----------------------|
| a) pen pressure | b) slant |
| c) line spacing | d) letter measurement |

Q.2 When police obtain a writing sample from the suspect, the sample is called a(n):

- | | |
|--------------|---------------|
| a) Sample | b) Exemplar |
| c) Screening | d) Graphology |

Q.3 What is fraudulence?

- a) Fraudulence is forgery done for material gain
- b) Fraudulence only applies to money and checks
- c) Fraudulence only applies to documents and works of art
- d) They are synonyms

Q.4 Questioned documents include:

- | | |
|----------------------------------|---------------------|
| a) petitions and lottery tickets | b) rare books |
| c) contracts and passports | d) all of the above |

Q.5 What acronym is used to describe the computer program that helps analyze handwriting samples?

- | | |
|----------|----------|
| a) AFIS | b) CODIS |
| c) NIBIN | d) FISH |

Q.6 Which of the following statements is not true?

- a) An individual's handwriting may show variation as a result of mood or emotional state
- b) The handwriting of an individual is unaffected by advancing years.
- c) The handwriting of an individual shows natural variation.
- d) The influence of alcohol or drugs may cause variation in an individual's handwriting.

Q.7 Handwriting samples can be a perfect match if they in fact came from the same person.

- | | |
|---------|----------|
| a) True | b) False |
|---------|----------|

Q.8 Counterfeiting is a federal offense that involves copying

- | | |
|--------------------------|---------------------|
| a) money | b) food stamps |
| c) social security cards | d) all of the above |

Q.9 A ransom note left at a crime scene was found to have similar characteristics to a suspect.

- a) The suspect can be convicted on this evidence alone
- b) The note can be considered a match in the eyes of the court
- c) The results of the comparison can be discussed in court by a certified document analysis expert
- d) the paper and pen used must be located before the evidence is admissible

Q.10 A student wrote a prescription for Xanax on a prescription pad she stole from her family doctor. She then got it filled then sold the pills at a graduation party. When she is caught, what will her some of her charges be?

- a) forgery
- b) fraudulence
- c) forgery and fraudulence
- d) only theft, because that's what started all of this

Q.11 Exemplar writings are

- | | |
|----------------------------|------------------------------|
| a) Unknown writing samples | b) Suspect's writing samples |
| c) Known writing samples | d) Victim's writing sample |

- Q.12 What does FISH stand for?**
a) Forensic Identification System of Handwriting
b) Forensic Information System of Handwriting
c) Forensic Identification Series of Handwriting
d) Forensic Information Series of Handwriting
- Q.13 Which of the following is the most common form of altered document?**
a) Addition
b) Erasure
c) Obliteration
d) Charred
- Q.14 Which of the following are examples of questioned documents?**
a) Receipts
b) Counterfeit money
c) Historical documents
d) All of the above
- Q.15 When a counterfeit detection pen is used on an authentic bill, what color does it turn?**
a) Pale blue
b) Pale yellow
c) Blue-back
d) Pale pink
- Q.16 _____ is an exact imitation of something important for deception**
a) Typescript
b) Counterfeit
c) Forgery
d) None of the above
- Q.17 Which of the following is considered the biggest manufacturer of counterfeit U.S. currency?**
a) Mexico
b) Columbia
c) Canada
d) U.S.
- Q.18 The mood of a writer can affect his or her handwriting**
a) True
b) False
- Q.19 Ink is considered a mixture**
a) True
b) False
- Q.20 Passports are not an example of a possible questioned document.**
a) True
b) False
- Q.21 The different dyes present in black ink can be separated using**
a) chromatography
b) freezing
c) thin layer microscopy
d) UV light
- Q.22 The Rf value for the different colors of dye seen in our ink lab was calculated by dividing**
a) the distance traveled by the total ink dot by the distance traveled by each color band
b) the distance traveled by the color band by the distance traveled by the alcohol
c) the distance traveled by the alcohol by the distance traveled by the sum of all bands
d) the distance traveled by the alcohol by the distance traveled by the average of the dye bands
- Q.23 Biometric signature pads determine authenticity of a signature used when using a credit card by analyzing what characteristics of a signature?**
a) spelling, letter size and letter slant
b) thickness of letters, nature of t-crosses and i-dots
c) speed, pressure and rhythm
d) comparison of capital to lower case letters, angle and use of loops
- Q.24 Forgery by erasure is easy to detect using**
a) an infrared beam to determine ink
b) a microscope to examine the surface of the paper
c) a UV beam to determine erasure type
d) chromatography to analyze paper damage
- Q.25 A forged letter from Abraham Lincoln is an example of**
a) literary forgery
b) check forgery
c) historical fiction
d) counterfeit currency
- Q.26 This machine detects alterations, obliterations, erasures and page substitutions...**
a) Video Spectral Comparator
b) Infrared spectroscope
c) Electrostatic Detection Device
d) Biometric Signature Pad
- Q.27 This technique is used to determine individual dye components from different inks...**
a) Infrared spectroscopy
b) Electrostatic Detection
c) Chromatography
d) Graphology
- Q.28 This device can be programmed to evaluate and record the speed, pressure, and rhythm of a person's signature...**
a) Infrared Spectroscope
b) Biometric Signature Pad
c) Video Spectral Comparator
d) Electrostatic Detection Device

Q.29 Adding to a number to make it look like a larger amount is considered what type of forgery?

- a) Obliteration
- b) Alteration
- c) Overwriting
- d) Freehand

Q.30 Bleaching, burning, or using a laser to get rid of a document is considered what type of forgery?

- a) Obliteration
- b) Alteration
- c) Overwriting
- d) Freehand

PART-B (DESCRIPTIVE TYPE QUESTIONS)

Q.1 Attempt all questions:-

- a) Define Forgery. What are its types? Explain Traced forgery. (5)
- b) Differentiate between: (2.5×2=5)
 - i. Typebar and Typewheel typewriters
 - ii. Fake and Genuine Currency note
- c) What are printing processes? Explain the printing process used for Indian currency note. (5)
- d) What are standards for comparison? Which one is better and why? (5)
- e) What are handwriting characteristics? How age and health affect individual's handwriting? (5)
- f) What do you understand by the term Alterations in Documents? How one can alter a document? (5)

- Q.11. Marsh test is for detection of
 a) Alkaloid detection b) Corrosives poison c) Arsenic d) Narcotics
- Q.12. Who is known as father of 'Toxicology'
 a) Mathieu orfila b) James Marsh c) J v fraunhofer d) Fred
- Q.13. Jean stas developed in 1850 method for detection of
 a) Vegetable alkaloids b) Astringents c) Arsenic d) Nicotine poisoning
- Q.14. Who developed paper chromatography first
 a) Mathieu orfila b) Mikhail Tsvet c) James Marsh d) Robert Bunsenand
- Q.15. In which year complete IR Spectrometer with interferometer developed
 a) 1930 b) 1880 c) 1948 d) 1949
- Q.16. AA Spectrophotometer was developed in the year
 a) 1960 b) 1930 c) 1948 d) 1955
- Q.17. When the Velocity of explosion is 400.Meters Per second it is called
 a) Explosion b) Detonation c) Blast d) High explosion
- Q.18. When explosives explode they produce
 a) Noise b) Heat c) Light d) All the above
- Q.19. Black Powder is a mixture of
 a) Potassium Nitrate, Sulphur and charcoal b) Arsenic sulphide & char coal
 c) Potassium chlorate, sulphur and Charcoal d) Nitrocellulose and Nitroglycerine
- Q.20. Principal constituent of a dynamite is
 a) Black powder b) Nitroglycerine c) T.N.T d) R.D.X
- Q.21. Which explosive is military grade.
 a) Nitroglycerine b) R.D.X c) T.N.T d) Black powder
- Q.22. Which explosive is used in demolition\ mining
 a) Potassium Nitrate b) R.D.X c) Nitroglycerine d) T.N.T
- Q.23. The Main constituents of throw down type Bombs are
 a) Black Powder & Potassium chlorate b) Charcoal & Arsenic sulphide
 c) Potassium nitrate and sulphur d) Potassium chlorate & Arsenic sulphide

- Q.24. Which is non destructive instrumental technique
 a) UV-Visual b) AAS c) FTIR d) HPLC
- Q.25. Which one is colour of aviation fuel (dye of fule)
 a) Trasparent b) Green c) Pink d) Red
- Q.26. Which one has lowest density
 a) Paraffins b) Aromatics c) Cycloparaffins d) Kerosene
- Q.27. Density of standard Petrol is (in gm\cm³)
 a) 0.790-0.770 b) 0.69.-0.620 c) 0.730-0.790 d) 0.720-0.735
- Q.28. The Colour of Premium petrol (dye colour is)
 a) White b) Green c) Red d) Orange
- Q.29. Velocity of detonation of TNT is
 a) 6900m\sec b) 5900 m\sec c) 7200 m\sec d) 5200 m\sec
- Q.30. The speed of the compressed air\ blast waves in high explosive is upto
 a) 1100 KMPH b) 10,00 KMPH c) 1200 KMPH d) 18000 KMPH

PART – B (DESCRIPTIVE TYPE)

- Q.1. Describe invetigationof Arson\fir cases, Physical evidences\ samples collected and analytical techniques used in analysis (10)
- Q.2. Describe Anatytical teachniques for the analysis of exhibitis involved in adultration in petroleum product (10)
- Q.3. a) What are the corrosive poisons? Describe any two corrosive poisons (5)
 b) Give brief not on analysis of insecticides in Viscera (5)

- Q.12** What is clumping of Red Blood Cells Called?
 a) Agglutination
 b) Antigen
 c) Antibody
 d) Thrombocyte
- Q.13** What blood type has neither A nor B antigen proteins?
 a) Type A
 b) Type B
 c) Type AB
 d) Type O
- Q.14** Which test is used to determine if a blood sample is human?
 a) Kastle-Meyer
 b) Luminol
 c) Precipitin
 d) Huminal
- Q.15** Which test is used to detect invisible blood stains?
 a) Kastle-Meyer
 b) Luminol
 c) Precipitin
 d) Huminal
- Q.16** Blood Typing is considered what type of evidence?
 a) Individual
 b) Class
 c) Trace
 d) Physical
- Q.17** Which part of the human blood can be used to forensically identify a person
 a) platelets
 b) plasma cells
 c) antigens
 d) antibodies
- Q.18** Which pieces of evidence would be used to substantiate a rape?
 a) blood and semen
 b) hair and fibers
 c) physical injuries
 d) all of these
- Q.19** Which of the following is NOT directly important to the forensic aspect of blood identification
 a) platelets
 b) red blood cells
 c) blood serum
 d) antigens
- Q.20** The backbone of a DNA molecule is made of ____
 a) sugar and base
 b) sugar and phosphate
 c) base and phosphate
 d) sugar only
- Q.21** A nucleotide is made up of ____.
 a) sugar only
 b) phosphate and sugar
 c) sugar, phosphate and base
 d) sugar and base
- Q.22** Which of the following is used to make numerous exact copies of DNA?
 a) STR
 b) gel electrophoresis
 c) Southern Blotting
 d) PCR
- Q.23** Who determined the structure of the DNA molecule?
 a) Mendel
 b) Watson and Crick
 c) Darwin
 d) Franklin
- Q.24** Mitochondrial DNA can identify a person based on their ____.
 a) father
 b) mother
 c) children
 d) siblings
- Q.25** Insect stage after the egg hatches
 a) 1st instar
 b) pupae
 c) 2nd egg stage
 d) adult
- Q.26** Ambient temperature is
 a) temperature of the amb's
 b) temperature of the surrounding air
 c) temperature of the water
 d) temperature of the dead body
- Q.27** Carrion means
 a) dead meat
 b) dead vegetables
 c) dead insects
 d) slang for "carry on"
- Q.28** What might a forensic scientist be asked to do in a murder trial?
 a) Identify whose blood is on the murder weapon
 b) Testify to the mental state of the accused
 c) Talk about the illegal accounting practices of the victim
 d) Explain what the victim was doing the day before the crime

Q.29 A young girl is missing, and investigators find a stained article of clothing where she was last seen. Testing the stain can tell investigators if the stain was:

- a) Twenty days old
- b) Animal blood
- c) An accidental spill.
- d) Caused by the killer.

Q.30 I am blood type B-. What are all the blood types can I receive?

- a) A-,B-,O-
- b) B-,B+,O-,O+
- c) B-,B+
- d) B-,O-

PART-B (DESCRIPTIVE TYPE QUESTIONS)

Q.1 Attempt all questions:-

- a) What is Seminal fluid? Write its composition. How will you identify the suspect from his semen sample? (5)
- b) Differentiate between: (2.5×2=5)
 - i. Teichmann and Takayama tests
 - ii. Blood Group A and AB
- c) What are the primary tests for the identification of blood? (5)
- d) A dead body was found in the fields with the blow flies over it. How will you estimate the time since death, when the weather conditions are hot? (5)
- e) What do you know about the illegal trade of wildlife species? Comment on Traditional Chinese Medicine. (5)
- f) Define Hair. Draw a neat and labelled diagram. Write its forensic significance. (5)

M. Sc (Forensic Science) – 2nd SEMESTER EXAMINATIONS; JUNE 2018
(SUB:- FORENSIC PSYCHOLOGY – II; PAPER CODE:- 05180205)

Time: 03 hrs

Maximum Marks: 60

Instructions:

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaint(s) in this regard, if any, should be made within 15 minutes of the commencement of the exam. No complaint in this regard will be entertained thereafter.
3. Each part is compulsory. Marks are indicated against each question.
4. Draw diagram wherever required.

PART – A (OBJECTIVE TYPE QUESTIONS OMR SHEET) (30X1=30)

Single response Question-

(15x1=15)

Q.1 Delusion is a disorder of

- a. Thought b. Perception c. Insight d. Cognition

Q.2 A patient is always preoccupied with feeling of illness. diagnosis is -

- a. Hypochondriasis b. Somatization disorder
c. Conversion disorder d. Obsession

Q.3 False perception without any external stimulus is-

- a. Illusion b. Hallucination c. Delirium d. Delusion

Q.4 Hallucination is disorder of

- a. Perception b. Thought c. Memory d. Intelligence

Q.5 Illusion is

- a. Misinterpretation of real object b. False firm belief
c. Absence of sensory stimulus d. Hearing of voices

Q.6 Kleptomania means-

- a. Irresistible desire o steal things b. Irresistible desire to drink
c. Irresistible desire to dress like opposite sex d. Irresistible desire to set fire things

Q.7 Visual hallucination are most commonly seen in

- a. Delusional syndrome b. Delirium
c. Mania d. OCD

Q.8 Phobia is

- a. Psychosis b. Fear of animal c. Anxiety d. Neurosis

Multiple Choice Questions-

(2.5x2=5)

Q.21 Erotomania is delusion in which-

- a. the person believes that someone is deeply in love with him/her.
- b. person develops an obsession for a particular person and starts believing that the other person is reciprocating.
- c. None of the above.
- d. Only a is correct.

Q.22 Brain mapping is

- a. It is also known as Brain Electrical oscillation signature.
- b. Neuronal activity of the brain generates rhythms where millions of cells depolarize in synchrony.
- c. Only one is correct
- d. None of the above.

PART – B (DESCRIPTIVE TYPE QUESTIONS) (30 MARKS)

Write Short Notes on the following Questions:

(5x6=30)

- Q.1 Narcoanalysis
- Q.2 Voice stress analyzer
- Q.3 Polygraphy
- Q.4 Legal insanity
- Q.5 McNaughten Rule
