

SEAT No. \_\_\_\_\_

No. of Printed Pages : 2

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**SARDAR PATEL UNIVERSITY**  
**M.Sc. Forensic Science (Semester –III) Examination**  
29<sup>th</sup> December 2020 Tuesday  
**PS03CFSC22: Forensic Toxicology, Pharmacology & Serology**

**TIME- 10:00 AM – 12:00 PM**

**TOTAL MARKS- 70**

**Instructions:**

1. Answer of all the questions (including multiple choice questions) should be written in the provided answer book only.
2. All the questions are compulsory.
3. Figures to the right indicate maximum marks of the questions.

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

**(08)**

- 1) Nux vomica is which type of Poison?  
A) Cerebral Poison  
B) Spinal Poison  
C) Cardiac Poison  
D) Asphyxia Poison
- 2) \_\_\_\_\_ includes Punishment for Adulteration of Drugs.  
A) Sec. 274 IPC  
B) Sec. 284 IPC  
C) Sec. 294 IPC  
D) Sec. 374 IPC
- 3) Electrophoresis can separate \_\_\_\_\_ form of drugs.  
A) Solid  
B) Liquid  
C) both A & B  
D) None of the above
- 4) Separation of \_\_\_\_\_ can be possible by TLC.  
A) Protein  
B) antibiotic  
C) Vitamins  
D) All of the above
- 5) Excretion of large polar substances, take place through  
A) Urinary excretion  
B) Excretion via the lungs  
C) Biliary excretion  
D) Excretion into breast milk
- 6) \_\_\_\_\_ is the fastest route for Drug Absorption.  
A) Oral B) Sublingual C) Subcutaneous D) All of the above
- 7) The Antigens of KIDD system are \_\_\_\_\_.  
A) Kp<sup>a</sup> and Kp<sup>b</sup>  
B) Jk<sup>a</sup> and Jk<sup>b</sup>  
C) Kidd1 and Kidd 2  
D) None of the above
- 8) which blood group consists of both A and B agglutination and no corresponding agglutinin is available?  
A) AB  
B) A  
C) O  
D) B

**Q-1(b) Answer True or False:**

**(16)**

1. Strychnine is available from the Leaves of the plant Strychnos Nux Vomica.
2. HCN will prevent use of oxygen at the tissue level.
3. Each wash of stomach tube should contain maximum volume of 200-250 ml.
4. Blood cannot be preserved in Gold chloride.
5. Electrophoresis can separate both solid and liquid form of drugs.
6. HPLC is not a column Chromatography.

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(P.T.O.)

7. TLC plates can be prepared by using Pouring & Dipping technique.
8. Analytical laboratories use solid phase extraction to concentrate and purify samples for analysis.
9. Rate of Drug Absorption do not depend on blood flow.
10. Volatile compounds are exhaled by breathing.
11. Excretion of poisonous substances can be possible through sweat.
12. Empty stomach absorbs poison Rapidly.
13. HLA is a type of Antigen.
14. Rh factor firstly discovered from a kind of Monkey.
15. Blood group type 'O' can be a type of Non-secretor.
16. Karl Landsteiner has introduced ABO Blood Group typing.

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

- 1) Define: Majoon
- 2) Explain: Marsh's Test for Arsenic
- 3) Give the Application of Gel Electrophoresis.
- 4) Give the full form of SPME.
- 5) What is Pharmacokinetics?
- 6) Write the examples of drugs shows Withdrawal symptoms.
- 7) Give Luminol test for Blood.
- 8) Full forms: PGM, GLO
- 9) What is Antisera?

**Q-3 Describe the products of Opium Poppy Plant. (08)**

**OR**

**Q-3 Explain Post mortem findings in case of Sulfuric Acid Poisoning. (08)**

**Q-4 What are the various chromatographic techniques we can use for estimation of poisons or drugs? Enlist it. Explain any one chromatographic technique. (08)**

**OR**

**Q-4 Explain : Instrumental Structure of SPME. (08)**

**Q-5 What is pharmacology? Give Factor influencing the effect of drug in human body? (08)**

**OR**

**Q-5 Explain the Stages under Alcoholic Influenced to person after consumption. (08)**

**Q-6 Explain in detail about ABO Blood Grouping system. (08)**

**OR**

**Q-6 Describe: HLA with its basic structure (08)**

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