

# FACT and FACT Plus Exam 20 March 2022

Exam Name	FACT and FACT Plus Exam 20 March 2022
Test Date	20/03/2022
Test Time :	9:00 AM - 11:00 AM
Subject	Forensic Chemical Sciences FACT

Option shown in green color with a tick icon is the correct answer.

## Section : Aptitude in Forensic Sciences

### Q.1 Proof of proper chain of custody procedures allows

- Ans
- ☐ 1. Evidence analysis
  - ☐ 2. Evidence packaging
  - ☐ 3. Evidence collection
  - ☒ 4. Evidence to be admitted to court

Question ID : 310578380

### Q.2 DNA is negatively charged because of the presence of

- Ans
- ☐ 1. Bromated groups in nucleotides
  - ☐ 2. Sulphate groups in nucleotides
  - ☒ 3. Phosphate groups in nucleotides
  - ☐ 4. Chlorate groups in nucleotides

Question ID : 310578396

### Q.3 Locard's principle specifically deals with

- Ans
- ☐ 1. Analysis of evidence
  - ☒ 2. Exchange of evidence
  - ☐ 3. Production of evidence
  - ☐ 4. Collection of evidence

Question ID : 310578375

### Q.4 Which of the following vaccine is not related with COVID19

- Ans
- ☐ 1. Covishield
  - ☐ 2. Covaxin
  - ☐ 3. Sputnik V
  - ☒ 4. Hep.B

Question ID : 310578361

**Q.5 The first Forensic Science Laboratory in India was set-up at**

- Ans ☒ 1. Delhi
- ☒ 2. Calcutta
- ☒ 3. Hyderabad
- ☒ 4. Chennai

Question ID : 310578372

**Q.6 Police inquest is conducted under section**

- Ans ☒ 1. 174 CrPC
- ☒ 2. 174 IPC
- ☒ 3. 176 IPC
- ☒ 4. 176 CrPC

Question ID : 310578371

**Q.7 Which of the following is a type of ballistics evidence**

- Ans ☒ 1. Blood
- ☒ 2. Drug
- ☒ 3. Bullet
- ☒ 4. Hair

Question ID : 310578378

**Q.8 The component of a computer that connects the processor to the other hardware is known as**

- Ans ☒ 1. Printer
- ☒ 2. Motherboard
- ☒ 3. Mouse
- ☒ 4. Keyboard

Question ID : 310578394

**Q.9 Causing hurt by means of poison, etc., with intent to commit as offence is covered under**

- Ans ☒ 1. Section 228 in the India Penal Code
- ☒ 2. Section 528 in the India Penal Code
- ☒ 3. Section 328 in the India Penal Code
- ☒ 4. Section 428 in the India Penal Code

Question ID : 310578408

**Q.10 Crime Scene Investigation doesn't involves**

- Ans ☒ 1. Sketches
- ☒ 2. Photography
- ☒ 3. Exhibits opening
- ☒ 4. Notes

Question ID : 310578379

**Q.11 Choose the different word**

- Ans ☒ 1. Lizard
- ☒ 2. Snake
- ☒ 3. Crocodile
- ☒ 4. Frog

Question ID : 310578366

**Q.12 Measurement close to a True value is known as**

- Ans ☒ 1. Error
- ☒ 2. Precise
- ☒ 3. Accurate
- ☒ 4. Average

Question ID : 310578399

**Q.13 Which of the following state/UT doesn't have a CFSL**

- Ans ☒ 1. Assam
- ☒ 2. Chandigarh
- ☒ 3. West Bengal
- ☒ 4. Gujarat

Question ID : 310578374

**Q.14 Corroborative Evidence**

- Ans ☒ 1. Refutes other evidence
- ☒ 2. Links an individual with a particular location
- ☒ 3. Associates an individual with another individual
- ☒ 4. Supports other evidence

Question ID : 310578377

**Q.15 Calvin Hooker Goddard was a forensic scientist best-known for his contribution in**

- Ans ☒ 1. DNA Forensic
- ☒ 2. Forensic Ballistics
- ☒ 3. Forensic Anthropology
- ☒ 4. Forensic Toxicology

Question ID : 310578376

**Q.16 The Headquarters of NABL secretariat is situated at**

- Ans ☒ 1. Kolkata  
☒ 2. Bangaluru  
☒ 3. Chennai  
☒ 4. Gurugram

Question ID : 310578382

**Q.17 Select correct word**

- Ans ☒ 1. Aceleration  
☒ 2. Acceleration  
☒ 3. Accelaration  
☒ 4. Aceeleration

Question ID : 310578364

**Q.18 Find the missing term: 125, 250, ???, 400**

- Ans ☒ 1. 275  
☒ 2. 375  
☒ 3. 100  
☒ 4. 200

Question ID : 310578368

**Q.19 Opinions of "Experts" falls under**

- Ans ☒ 1. Section 45 in the India Evidence Act, 1872  
☒ 2. Section 46 in the India Evidence Act, 1872  
☒ 3. Section 44 in the India Evidence Act, 1872  
☒ 4. Section 47 in the India Evidence Act, 1872

Question ID : 310578407

**Q.20 The laboratory accreditation services to testing and calibration laboratories are provided in accordance with**

- Ans ☒ 1. ISO/IEC 17025  
☒ 2. ISO/IEC 17024  
☒ 3. ISO/IEC 17023  
☒ 4. ISO/IEC 17026

Question ID : 310578387

**Q.21 In Thin layer chromatography the mobile phase is**

- Ans ☒ 1. Liquid  
☒ 2. Gel  
☒ 3. Gas  
☒ 4. Solid

Question ID : 310578393

**Q.22 Mirror is to Reflection as Water is to**

- Ans ☒ 1. Conduction  
☒ 2. Refraction  
☒ 3. Dispersion  
☒ 4. Immersion

Question ID : 310578370

**Q.23 RFSL Stands for**

- Ans ☒ 1. Road Forensic Science Laboratory  
☒ 2. Railway forensic Science Laboratory  
☒ 3. Rapid Forensic Science Laboratory  
☒ 4. Regional forensic Science Laboratory

Question ID : 310578373

**Q.24 If, Bird: Wings, choose correct relationship of the following pairs**

- Ans ☒ 1. Dog: Lungs  
☒ 2. Pen: Paper  
☒ 3. Car: Wheel  
☒ 4. Whale: Water

Question ID : 310578369

**Q.25 CAB shall apply for renewal of accreditation of NABL at least \_\_\_\_\_ months before the expiry of the validity of accreditation.**

- Ans ☒ 1. 12 months  
☒ 2. 6 months  
☒ 3. 9 months  
☒ 4. 3 months

Question ID : 310578386

**Q.26 The patient was cured \_\_\_\_\_ Malaria.**

- Ans ☒ 1. For  
☒ 2. From  
☒ 3. Of  
☒ 4. Through

Question ID : 310578365

**Q.27 Meaning of Standard deviation is**

- Ans ☒ 1. How near are the data points from the mean  
☒ 2. How far are the data points form the range  
☒ 3. How near are the data points from the range  
☒ 4. How far are the data points form the mean

Question ID : 310578406

**Q.28 CAB in NABL accreditation stands for**

- Ans
- ☐ 1. Controlling Auditory Body
  - ☐ 2. Controlling Assessment Body
  - ☒ 3. Conformity Assessment Body
  - ☐ 4. Conformity Auditory Body

Question ID : 310578385

**Q.29 Which of the following Indian state does not share its border with Myanmar**

- Ans
- ☐ 1. Manipur
  - ☐ 2. Nagaland
  - ☒ 3. Assam
  - ☐ 4. Arunachal Pradesh

Question ID : 310578363

**Q.30 Fingerprints examination is also termed as**

- Ans
- ☐ 1. Trichology
  - ☒ 2. Dactyloscopy
  - ☐ 3. Entomology
  - ☐ 4. Palynology

Question ID : 310578381

**Q.31 The Daubert test required that the trial judge make the determination based on one of the following factors**

- Ans
- ☐ 1. The science must be rigorous
  - ☐ 2. The science must be social
  - ☐ 3. The science must be hypothetical
  - ☒ 4. The science must be valid

Question ID : 310578409

**Q.32 Who won Bronze medal in Badminton in Tokyo Olympics 2020**

- Ans
- ☐ 1. Neeraj Chopra
  - ☒ 2. P.V. Sindhu
  - ☐ 3. Ravi Kumar
  - ☐ 4. Bajrangpunia

Question ID : 310578362

**Q.33 APLAC stands for**

- Ans
- ☒ 1. Asia Pacific Laboratory Accreditation Cooperation
  - ☐ 2. America pacific Laboratory Audit Cooperation
  - ☐ 3. America Pacific Laboratory Accreditation Cooperation
  - ☐ 4. Asia Pacific Laboratory Audit cooperation

Question ID : 310578383

**Q.34 NABL accreditation system is established in accordance with**

- Ans ☒ 1. ISO/IEC 17011  
☐ 2. ISO/IEC 17013  
☐ 3. ISO/IEC 17012  
☐ 4. ISO/IEC 17014

Question ID : 310578390

**Q.35 Which microscope is used for comparing bullets**

- Ans ☐ 1. Phase contrasts microscope  
☒ 2. Comparison microscope  
☐ 3. Polarized microscope  
☐ 4. Compound microscope

Question ID : 310578398

**Q.36 A parameter is a measure which is computed from**

- Ans ☐ 1. Test statistics  
☐ 2. Sample data  
☒ 3. Population data  
☐ 4. Analyzed data

Question ID : 310578401

**Q.37 The word ethics is related with**

- Ans ☐ 1. Knowledge  
☒ 2. Behavior  
☐ 3. Physique  
☐ 4. Judgment

Question ID : 310578410

**Q.38 What is "Mean" of the 1,3,5,7,9**

- Ans ☐ 1. 9  
☐ 2. 3  
☐ 3. 7  
☒ 4. 5

Question ID : 310578402

**Q.39 Probability in mathematics means**

- Ans ☒ 1. The chance that the given event will occur  
☐ 2. The chance that the given event will not occur  
☐ 3. Average of the total number  
☐ 4. Standard error of the given data set

Question ID : 310578403

**Q.40** A pre-assessment visit of the CAB is organized by \_\_\_\_\_ appointed by NABL.

- Ans**
- ☐ 1. Lead Director
  - ☐ 2. Lead Observer
  - ☒ 3. Lead Assessor
  - ☐ 4. Lead Technician

Question ID : 310578384

**Q.41** Which of the following is related with NABL accreditation

- Ans**
- ☐ 1. Profile Testing
  - ☒ 2. Proficiency Testing
  - ☐ 3. Program Testing
  - ☐ 4. Proper Testing

Question ID : 310578389

**Q.42** Deepak walks 20 km towards North. He turns left and walks 40 km. He again turns left and walks 20 km. Finally he moves 20 km after turning to the left. How far is he from his starting position ?

- Ans**
- ☒ 1. 20 km
  - ☐ 2. 40 km
  - ☐ 3. 10 km
  - ☐ 4. 30 km

Question ID : 310578367

**Q.43** Difference between the maximum and minimum values of the given observation is called

- Ans**
- ☐ 1. Standard deviation
  - ☒ 2. Range
  - ☐ 3. Degree of freedom
  - ☐ 4. Average

Question ID : 310578405

**Q.44** Random sampling is also known as

- Ans**
- ☐ 1. Proper sampling
  - ☐ 2. Precision sampling
  - ☐ 3. Population sampling
  - ☒ 4. Probability sampling

Question ID : 310578404



**Q.45 BIS stands for**

- Ans ☒ 1. Bureau of Indian Standards
- ☐ 2. Bureau of Internal Standards
- ☐ 3. Bureau of International Standards
- ☐ 4. Bureau of Innovation Standards

Question ID : 310578388

**Q.46 Which of the following is an output device of a computer**

- Ans ☐ 1. Joy stick
- ☒ 2. Printer
- ☐ 3. Mouse
- ☐ 4. Keyboard

Question ID : 310578395

**Q.47 Who invented Chromatography**

- Ans ☐ 1. Mikhail Kalashnikov
- ☐ 2. Mikhail Baryshnikov
- ☐ 3. Mikhail Hendricks
- ☒ 4. Mikhail Tsvet

Question ID : 310578391

**Q.48 Which of the following terms is not related with handwriting identification in legal cases.**

- Ans ☐ 1. Line quality
- ☒ 2. Trail
- ☐ 3. Spacing
- ☐ 4. Hiatus

Question ID : 310578397

**Q.49 ICP-MS stands for**

- Ans ☐ 1. Inductively Collected Plasma Mass Spectrometry
- ☐ 2. Inductively Cooled Plasma Mass Spectrometry
- ☒ 3. Inductively Coupled Plasma Mass Spectrometry
- ☐ 4. Inductively Conducted Plasma Mass Spectrometry

Question ID : 310578392

**Q.50 Sampling in any population study is conducted because it is**

- Ans ☐ 1. Expensive
- ☐ 2. Difficult
- ☐ 3. Biased
- ☒ 4. Time – efficient

Question ID : 310578400

## Section : Forensic Chemical Sciences

**Q.51 Lead in petroleum is detected by**

- Ans
- ☐ 1. GC-MS
  - ☐ 2. NMR
  - ☐ 3. HPLC
  - ☒ 4. NAA

Question ID : 310578429

**Q.52 Which of the following opium alkaloid is used in a cough syrup**

- Ans
- ☐ 1. Narcotine
  - ☐ 2. Morphine
  - ☒ 3. Codeine
  - ☐ 4. Thebaine

Question ID : 310578479

**Q.53 Photomultiplier tube is NOT suitable for detection of**

- Ans
- ☒ 1. IR photons
  - ☐ 2. UV photons
  - ☐ 3. Fluorescence
  - ☐ 4. Visible photons

Question ID : 310578450

**Q.54 Proof spirit is a mixture of alcohol and water, with combination of**

- Ans
- ☐ 1. 30% alcohol by volume
  - ☐ 2. 37% alcohol by volume
  - ☒ 3. 57% alcohol by volume
  - ☐ 4. 47% alcohol by volume

Question ID : 310578413

**Q.55 Which of the following are the antidotes in case of methanol poisoning ?**

- Ans
- ☐ 1. Atropine
  - ☒ 2. Fomepizole
  - ☐ 3. Hydroxy cobalamine
  - ☐ 4. N-acetylcysteine

Question ID : 310578439

**Q.56 Wall scrappings can be used as a first aid remedy in poisoning by:**

- Ans
- ☐ 1. Salicylic acid
  - ☐ 2. Hydrochloric acid
  - ☒ 3. Oxalic acid
  - ☐ 4. Carbolic acid

Question ID : 310578466

**Q.57 Viscosity can be identify by:**

- Ans
- ☐ 1. Pycnometer
  - ☐ 2. Hygrometer
  - ☐ 3. Osmometer
  - ☒ 4. Rheometer

Question ID : 310578423

**Q.58 Aluminium Phosphide can be test by:**

- Ans
- ☐ 1. Scott test
  - ☐ 2. Reinsch test
  - ☒ 3. Gutzeit test
  - ☐ 4. Negm test

Question ID : 310578477

**Q.59 Which is used as antiknocking agent?**

- Ans
- ☐ 1. Tetra ethyl lead
  - ☐ 2. CMT
  - ☐ 3. None of these
  - ☒ 4. Both a and b

Question ID : 310578422

**Q.60 Phenolphthalein is**

- Ans
- ☐ 1. Carcinogenic
  - ☐ 2. Indicator
  - ☐ 3. Laxative
  - ☒ 4. Both b and c

Question ID : 310578456

**Q.61 Mass fragments m/z 303, 272, 182, 22 are commonly observed in**

- Ans
- ☐ 1. Buprenorphine
  - ☒ 2. Cocaine
  - ☐ 3. Ephedrine
  - ☐ 4. Diamorphine

Question ID : 310578435

**Q.62 Dille-koppanyi is specific test for the detection of**

- Ans
- ☐ 1. Phenothiazines
  - ☒ 2. Barbiturates
  - ☐ 3. Benzodiazepines
  - ☐ 4. Cannabinoids

Question ID : 310578447

**Q.63 Dimercaprol is useful in the treatment of poisoning by:**

- Ans ☒ 1. Mercury  
☒ 2. Lead  
☒ 3. Cyanide  
☒ 4. Phosphorus

Question ID : 310578463

**Q.64 Dicobalt acetate is drug of choice in the treatment of poisoning by:**

- Ans ☒ 1. Cyanide  
☒ 2. Mercury  
☒ 3. Aluminium phosphide  
☒ 4. Lead

Question ID : 310578473

**Q.65 Idukki gold name given to**

- Ans ☒ 1. Opium  
☒ 2. Cannabis  
☒ 3. Coca  
☒ 4. Peyote

Question ID : 310578476

**Q.66 Synergic effect is observed in following**

- Ans ☒ 1. Alcohol and promethazine  
☒ 2. Alcohol and cocaine  
☒ 3. Alcohol and flunitrazepam  
☒ 4. Alcohol and phenobarbitone

Question ID : 310578458

**Q.67 Which of the following is the metabolite of Diazepam**

- A. Alprazolam  
B. Oxazepam  
C. Lorazepam  
D. Temazepam

Choose the correct answer from the options given below:

- Ans ☒ 1. A and B  
☒ 2. C and D  
☒ 3. B And D  
☒ 4. A and D

Question ID : 310578448

**Q.68** What percentage of alcohol is absorbed through the stomach walls into the portal vein of the blood system?

- Ans ☒ 1. 20%
- ☐ 2. 30%
- ☐ 3. 40%
- ☐ 4. 10%

Question ID : 310578425

**Q.69** Which among the following is most potent opiate

- Ans ☒ 1. Fentanyl
- ☐ 2. Herion
- ☐ 3. Morphine
- ☐ 4. MDMA

Question ID : 310578415

**Q.70** COTPA act was framed and executed in the year

- Ans ☐ 1. 2001
- ☐ 2. 2002
- ☒ 3. 2003
- ☐ 4. 2004

Question ID : 310578421

**Q.71** In case of acute CO poisoning, coma and death with lively red colour occur at the carboxy haemoglobin level of:

- Ans ☐ 1. 10-30%
- ☐ 2. 40-50%
- ☐ 3. 30-40%
- ☒ 4. 50-60%

Question ID : 310578459

**Q.72** In gas chromatography technique which of the following gases is NOT suitable ?

- Ans ☐ 1. Argon
- ☒ 2. Helium
- ☐ 3. Oxygen
- ☐ 4. Nitrogen

Question ID : 310578449

**Q.73** In which one of the following types of liquid chromatography, immobilized biochemical is used as a stationary phase ?

- Ans** ☒ 1. Affinity chromatography  
☐ 2. Exclusion chromatography  
☐ 3. Gel permeation chromatography  
☐ 4. Ion exchange chromatography

Question ID : 310578440

**Q.74** Pseudoephedrine and ephedrine are:

- Ans** ☐ 1. Enantiomers  
☒ 2. Diastereomers  
☐ 3. Conjugates  
☐ 4. Tautomers

Question ID : 310578419

**Q.75** Maximum diaphoretic action can be seen with:

- Ans** ☐ 1. Alcohol  
☒ 2. Piocarpine  
☐ 3. Paracetamol  
☐ 4. Salicylates

Question ID : 310578465

**Q.76** Animal affected by poisons similar to human beings is:

- Ans** ☐ 1. Frogs  
☐ 2. Rabbit  
☒ 3. Cat  
☐ 4. Guinea pig

Question ID : 310578461

**Q.77** Subsonic explosions are created by low explosives through a process known as.

- Ans** ☐ 1. Brisance  
☐ 2. Sonic explosion  
☒ 3. Deflagration  
☐ 4. Detonations

Question ID : 310578432

**Q.78** Which one is not prepared from grape ?

- Ans** ☐ 1. Wine  
☐ 2. Sherry  
☐ 3. Cognac  
☒ 4. Whisky

Question ID : 310578417

**Q.79 Which of the following is NOT a limitation of beer lambert's Law, which gives the relation between absorption, thickness and concentration on**

- Ans** ☒ 1. Radiation must have higher bandwidth  
☐ 2. Concentration must be lower  
☐ 3. Does not consider factors other than thickness and concentration  
☐ 4. Radiation source must be monochromatic

Question ID : 310578437

**Q.80 Which is not an example of primary high explosive ?**

- Ans** ☐ 1. Mercury fulminate  
☒ 2. RDX  
☐ 3. Lead azide  
☐ 4. None of these

Question ID : 310578434

**Q.81 Which of the following explosives was first prepared for medicinal use in 1899 ?**

- Ans** ☒ 1. RDX  
☐ 2. HMX  
☐ 3. PETN  
☐ 4. ANFO

Question ID : 310578446

**Q.82 Half-life of archaeological objects can be determined by**

- Ans** ☐ 1. XRF  
☐ 2. ICP-AES  
☒ 3. NAA  
☐ 4. ICP-MS

Question ID : 310578451

**Q.83 QuEChERS method is employed for extraction of**

- Ans** ☐ 1. Acid residue  
☐ 2. Drug residue  
☒ 3. pesticide residue  
☐ 4. Hydrocarbon

Question ID : 310578436

**Q.84 Smell of bitter almonds is present in poisoning by:**

- Ans** ☐ 1. Oxalic acid  
☐ 2. Phosphorus  
☒ 3. Prussic acid  
☐ 4. Arsenic

Question ID : 310578471

**Q.85** An average red blood cell contains about \_\_\_\_\_ molecules of hemoglobin

- Ans ☒ 1. Approx. 13 trillion  
☒ 2. Approx. 270 million  
☒ 3. Approx. 800 billion  
☒ 4. Approx.. 740 thousand

Question ID : 310578424

**Q.86** Alkalinisation of urine is indicated in poisoning by:

- Ans ☒ 1. Salicylates  
☒ 2. Organophosphates  
☒ 3. Opiates  
☒ 4. Amphetamines

Question ID : 310578464

**Q.87** Supersonic explosions created by high explosives are known as,

- Ans ☒ 1. Brisance  
☒ 2. Deflagration  
☒ 3. Sonic explosion  
☒ 4. Detonations

Question ID : 310578428

**Q.88** TNT is common street name of

- Ans ☒ 1. Methadone  
☒ 2. Pethidine  
☒ 3. Designer amphetamine  
☒ 4. Designer fentanyl

Question ID : 310578430

**Q.89** Zimmerman test is for specific identification of

- Ans ☒ 1. Crack  
☒ 2. Cathine  
☒ 3. Calmpose  
☒ 4. Cannabis

Question ID : 310578455

**Q.90** "Run amok" condition may be seen in chronic poisoning by:

- Ans ☒ 1. Cocaine  
☒ 2. Opium  
☒ 3. Cannabis  
☒ 4. Dhatura

Question ID : 310578468



**Q.91 The term moonshine is 'referred for'**

- Ans ☒ 1. Illicit liquor
- ☐ 2. For all of these
- ☐ 3. Distilled liquor
- ☐ 4. Undistilled liquor

Question ID : 310578411

**Q.92 Red colored tears may be seen in acute poisoning by:**

- Ans ☐ 1. Heroin
- ☒ 2. Organophosphorus
- ☐ 3. Dhatura
- ☐ 4. Cocaine

Question ID : 310578469

**Q.93 Which of the following are advantages of solid- phase extraction over liquid extraction ?**

- A. Small sample size
- B. High solvent consumption
- C. Emulsion formation
- D. High extraction efficiency

Choose the correct answer from the options given below:

- Ans ☐ 1. A and B
- ☐ 2. A and D
- ☐ 3. B and C
- ☒ 4. C and D

Question ID : 310578443

**Q.94 Pathological jealousy is diagnostic of:**

- Ans ☒ 1. Alcoholic intoxication
- ☐ 2. Cocaine intoxication
- ☐ 3. Tobacco intoxication
- ☐ 4. Cannabis intoxication

Question ID : 310578460

**Q.95 Which one of the following cannot be conserved during Raman Scattering ?**

- Ans ☒ 1. Kinetic energy
- ☐ 2. Electronic energy
- ☐ 3. Total Energy
- ☐ 4. Momentum

Question ID : 310578438

**Q.96 Flash point measured in**

- Ans ☐ 1. Thermometer  
☐ 2. Barometer  
☐ 3. None of these  
☒ 4. Abel's apparatus

Question ID : 310578420

**Q.97 Is not an example of designer drug**

- Ans ☐ 1. JWH-018  
☐ 2. Bath salt  
☒ 3. Delta-9-THC  
☐ 4. Ecstasy

Question ID : 310578427

**Q.98 The average rate of alcohol elimination in breath per hour is**

- Ans ☐ 1. 6.5 µg/dl  
☐ 2. 25 µg/dl  
☐ 3. 20 µg/dl  
☒ 4. 15 µg/dl

Question ID : 310578452

**Q.99 Universal antidote contains:**

- Ans ☐ 1. Charcoal, Potassium permanganate and Tannic acid  
☒ 2. Magnesium Oxide, Charcoal and Tannic acid  
☐ 3. Magnesium oxide, Charcoal and Potassium Permanganate  
☐ 4. Potassium permanganate, Magnesium oxide and Tannic acid

Question ID : 310578462

**Q.100 The ratio of alcohol in the blood to alcohol in alveoli air is approximately**

- Ans ☒ 1. 2100:1  
☐ 2. 1:2100  
☐ 3. 1:2500  
☐ 4. 2500:1

Question ID : 310578431

**Q.101 The minimum temperature at which equal, volume of a hydrocarbon is perfectly miscible with same amount of the compound ( $C_6H_5NH_2$ ) is know as**

- Ans ☐ 1. Mixing point  
☐ 2. Flash point  
☒ 3. Aniline point  
☐ 4. None of these

Question ID : 310578426

**Q.102 Pesticide in biological tissue can be extracted and isolated by:**

- Ans
- ☒ 1. Digestion and LLE
  - ☒ 2. None of these
  - ☒ 3. Filtration and LLE
  - ☒ 4. Distillation and LLE

Question ID : 310578416

**Q.103 When ethanol is used as an additive to motor fuels to act as a fuel for internal combustion of engines, it is called**

- Ans
- ☒ 1. Power alcohol
  - ☒ 2. Denatured spirit
  - ☒ 3. Rectified spirit
  - ☒ 4. Proof spirit

Question ID : 310578412

**Q.104 The shock and noise produced during explosion is called**

- Ans
- ☒ 1. Sonic explosion
  - ☒ 2. Deflagration
  - ☒ 3. Brisance
  - ☒ 4. Detonations

Question ID : 310578433

**Q.105 Iodoform test is given by**

- Ans
- ☒ 1. Formaldehyde
  - ☒ 2. Formic acid
  - ☒ 3. Methanol
  - ☒ 4. Ethanol

Question ID : 310578414

**Q.106 Pheromones are \_\_\_\_\_**

- Ans
- ☒ 1. Enzymes
  - ☒ 2. Proteins
  - ☒ 3. Hormones
  - ☒ 4. Venoms

Question ID : 310578474

**Q.107 Sampling techniques used in FT-IR**

- Ans
- ☒ 1. All of these
  - ☒ 2. Nuzol Mull
  - ☒ 3. Calcium fluoride cell
  - ☒ 4. Pellet

Question ID : 310578475

**Q.108 Muttering delirium is seen in poisoning by:**

- Ans
- ☒ 1. Organophosphates
  - ☒ 2. Charas
  - ☒ 3. Dhatura
  - ☒ 4. Bhang

Question ID : 310578467

**Q.109 Which type of neutron is most suitable for NAA technique ?**

- Ans
- ☒ 1. Very low energy neutron
  - ☒ 2. Thermal neutron
  - ☒ 3. High energy neutron
  - ☒ 4. Cold neutron

Question ID : 310578454

**Q.110 The drug which was gazette notified has scheduled drug in India in April 2018**

- Ans
- ☒ 1. Mescaline
  - ☒ 2. Pseudoephedrine
  - ☒ 3. Tramadol
  - ☒ 4. Fentanyl

Question ID : 310578470

**Q.111 The process of sublimation is used in**

- Ans
- ☒ 1. HPLC
  - ☒ 2. None of these
  - ☒ 3. Pyrolysis GC
  - ☒ 4. TLC and HPTLC

Question ID : 310578480

**Q.112 Hypostasis is cherry-red in colour, in poisoning with:**

- Ans
- ☒ 1. Carbon monoxide
  - ☒ 2. Hydrogen sulphide
  - ☒ 3. Aniline
  - ☒ 4. Phosphorus

Question ID : 310578472

**Q.113 Which one of the following statements is NOT true about mass spectrometer?**

- Ans
- ☒ 1. It is suitable for library retrieval
  - ☒ 2. Impurities of masses different from the target component interfere
  - ☒ 3. It has great sensitivity
  - ☒ 4. It is suitable for data storage

Question ID : 310578441

**Q.114** If copper or Iron present in alcohol as impurities, then under the influence of conc. HNO<sub>3</sub> and Potassium ferrocyanide it gives

- Ans ☒ 1. Pink and Blue color  
☒ 2. Chocolate and Blue color  
☒ 3. Green and Purple Color  
☒ 4. Red and Blue color

Question ID : 310578418

**Q.115** The modern breath alcohol instrument is based on which of the following technologies ?

- Ans ☒ 1. Fluorescence spectroscopy  
☒ 2. Infrared spectroscopy  
☒ 3. NMR spectroscopy  
☒ 4. Emission spectroscopy

Question ID : 310578453

**Q.116** Diphenyl amine test can be used to detect which one of the following ?

- Ans ☒ 1. Oxalic  
☒ 2. Carbolic  
☒ 3. Nitric  
☒ 4. Sulphuric

Question ID : 310578445

**Q.117** Which of the following are correct regarding the addition of internal standard (IS) during the extraction of drug from biomatrix ?

- A. IS should mimic the physicochemical properties of the drug  
B. IS should react with target drug  
C. IS should not react with target drug  
D. IS should make the method less sensitive

Choose the correct answer from the options given below:

- Ans ☒ 1. A and C only  
☒ 2. A and B only  
☒ 3. C And D only  
☒ 4. B and D only

Question ID : 310578444

**Q.118** An explosion during a fire due to the mixing of fresh air in a compartment having inflammable volatile pyrolysis products & low oxygen, is known as

- Ans ☒ 1. Rollover  
☒ 2. Dropdown  
☒ 3. Flameover  
☒ 4. Flashback

Question ID : 310578442

**Q.119 Mark the poison that acts on the heart**

- Ans**
- ☒ 1. Potassium cyanide
  - ☒ 2. Oleander
  - ☒ 3. Phosphorous
  - ☒ 4. Amphetamine

Question ID : **310578478**

**Q.120 MAcEwen's sign is a manifestation of massive intake of:**

- Ans**
- ☒ 1. Ethanol
  - ☒ 2. Atropine
  - ☒ 3. Methanol
  - ☒ 4. Opium

Question ID : **310578457**