

01. Which kidney Disease is a "Global Public Health" Problem Worldwide ?
- (1) Acute Kidney Injury (AKI)
 - (2) Kidney Stone
 - (3) Chronic Kidney Disease (CKD)
 - (4) Renal Papillary Necrosis
02. Which Virus affects mainly Human Immune System ?
- (1) Hepatitis A Virus (HAV)
 - (2) Parvo Virus B19
 - (3) Cytomegla Virus (CMV)
 - (4) Human Immunodeficiency Virus (HIV)
03. Which BHU Alumnus is honoured with "Bharat Ratna" ?
- | | |
|---------------------|-------------------------|
| (1) Prof.K.N.Udappa | (2) Prof.O.N.Srivastava |
| (3) Prof.C.N.R.Rao | (4) Prof.R.D.Dwivedi |
04. Which of the following drug is used as "Immunosuppression" ?
- | | |
|-------------------|------------------|
| (1) Citrofloxocin | (2) Aspirin |
| (3) Ampicillin | (4) Cyclosporine |
05. The Probability of a particle to cross a barrier of height more than the kinetic energy of the particle is :
- | | |
|--------------------------|---------|
| (1) zero | (2) one |
| (3) between zero and one | (4) 50% |

06. Deficiency of which of the following mineral nutrients induces dental carries and mottled enamel ?
- (1) Molybdenum (2) Cobalt
(3) Fluorine (4) Iron
07. Oxidation number of Iodine is highest in which compound ?
- (1) KI (2) KI₃
(3) IF₅ (4) KIO₄
08. In which part of our body, antibodies are formed ?
- (1) Brain (2) Lungs
(3) Bone marrow (4) Spleen
09. Which of the following sensations is not generated by impulses initiated in naked nerve endings ?
- (1) Touch (2) Pain
(3) Cold (4) Smell
10. Sound cannot travel through :
- (1) Air (2) Water
(3) Fire (4) Vacuum
11. Sommer's movements of Forensic Medicine are associated with :
- (1) Decomposition (2) rigor mortis
(3) Post mortem lividity (4) Mummification

12. Father of Modern toxicology is :
- | | |
|----------------|----------------|
| (1) J. Cameron | (2) Alfred |
| (3) Orfila | (4) Rokitansky |
13. The process which causes drying up of tissues and internal viscera to a sufficient degree to halt putrefaction is called :
- | | |
|--------------------|-------------------------|
| (1) Saponification | (2) Adipocere formation |
| (3) Mummification | (4) Putrefaction |
14. Temperature of the body rises up for the first 2 hrs after death. The probable condition includes the following except :
- | | |
|----------------|----------------|
| (1) Sun stroke | (2) Frost bite |
| (3) Septicemia | (4) Tetanus |
15. Typical injury in a bomb explosion is :
- (1) Abrasion
 - (2) Punctate bruises
 - (3) Puncture laceration
 - (4) A triad of punctate bruises, abrasions and puncture lacerations
16. Arborescent markings are due to :
- | | |
|---------------|---------------|
| (1) Dry burns | (2) Scalds |
| (3) hanging | (4) Lightning |
17. The most common type of haemorrhage seen in boxers is :
- | | |
|------------------|-------------------|
| (1) Extradural | (2) Subdural |
| (3) Subarachnoid | (4) Intracerebral |
18. Which of the following is more dangerous in causing spinal damage ?
- (1) Hyperextension of the neck
 - (2) Hyperflexion of the neck
 - (3) Both hyperflexion and hyperextensions of the neck
 - (4) None can cause spinal damage

19. Greenish colour in a contusion is due to :
- (1) Haemosiderin
 - (2) Haematoidin
 - (3) Sulphmethemoglobin
 - (4) Methaemoglobin
20. Gutter fracture is caused by :
- (1) A firearm missile glancing along the outer table of the skull
 - (2) Falling into a shallow gutter
 - (3) Falling into a river or any other body of water
 - (4) Both (b) and (c)
21. In the skull, fractures caused not at the point of impact, but some distance away from it is known as :
- (1) Diagonal fractures
 - (2) Atypical skull fractures
 - (3) Bursting fractures
 - (4) Depressed fractures
22. For diatom test, the best site for taking samples is :
- (1) Lungs
 - (2) Bone marrow in ulna
 - (3) Bone marrow in femur
 - (4) A large and fleshy muscle
23. Cyanide is toxic because it :
- (1) Inhibits cytochrome C oxidase
 - (2) Forms cyan meth-Hb
 - (3) Inhibits ATP carrier in mitochondria
 - (4) Inhibits Na⁺-K⁺ ATPase
24. Hostile witness comes under :
- (1) IPC 191
 - (2) IPC 171
 - (3) IPC 141
 - (4) IPC 131

25. A boy has 16 permanent teeth and 8 temporary teeth. His age is likely to be :
- (1) 09 yrs (2) 10 yrs
(3) 11 yrs (4) 12 yrs
26. juvenile is a girl who has not attained the age of :
- (1) 12 years (2) 14 years
(3) 16 years (4) 18 yrs
27. Rokitansky's method is :
- (1) An autopsy technique for infants
(2) Used in heavy metal detection
(3) Used for estimation of age using skull sutures
(4) Used in brain mapping
28. Which of the following is NOT a cause of death due to suffocation ?
- (1) Smothering (2) Choking
(3) Gagging (4) Throttling
29. All are grievous hurts EXCEPT :
- (1) Dislocated shoulder
(2) Incised wound on abdominal wall without peritoneal injury
(3) Nasal bone fracture
(4) Permanent disfigurement of face
30. Sexual asphyxia is seen in :
- (1) Transvestism (2) Frotteurism
(3) Masochism (4) Tribadism
31. Charas' is :
- (1) Leaves of Cannabis indica
(2) Flowers of Cannabis indica
(3) Stem of Cannabis indica
(4) Resin exudates of cannabis indica

- 32.** Specimens for toxicological studies are preserved in :
- (1) 10% formaldehyde
 - (2) Alcohol
 - (3) Supersaturated solution of common salt
 - (4) Normal saline
- 33.** Atropine is contraindicated in :
- (1) Mushroom poisoning
 - (2) Oleander poisoning
 - (3) Datura poisoning
 - (4) Organophosphorus
- 34.** The colour of postmortem staining is brick red in poisoning with :
- (1) Carbon monoxide
 - (2) Phosphorous
 - (3) Cyanides
 - (4) Carbon dioxide
- 35.** Zinc phosphide is a :
- (1) Contact poison
 - (2) Respiratory poison
 - (3) Stomach poison
 - (4) Hemotoxin
- 36.** 'Lucid Interval' may be seen in :
- (1) Extradural haemorrhage
 - (2) Insanity
 - (3) Subdural haemorrhage
 - (4) Both A and B
- 37.** Telephone is :
- (1) Pulling of hair
 - (2) Beating on soles
 - (3) Beating on ears
 - (4) Beating on fingers
- 38.** The fetus can be considered viable if the following ossification center appears :
- (1) Calcaneum
 - (2) Manubrium sterni
 - (3) Lower end of femur
 - (4) None of the above

39. In India, magistrate inquest is done in the following cases, EXCEPT :

- (1) Exhumation cases
- (2) Dowry deaths within 5 years of marriage
- (3) Murder cases
- (4) Death of a person in police custody

40. Same charged two proteins separation is done by :

- (1) Agarose
- (2) DEAE Cellulose
- (3) Sephadex
- (4) None

Short Answer Questions

Note: Attempt any **five** questions. Write answer in **150-200** words. Each question carries **16** marks. Answer each question on separate page, after writing Question Number.

01. What are different methods of collection of physical evidences from a crime scene ?
02. What is Forensic toxicology ? Enumerate different war gases used in modern warfare.
03. Enumerate the samples to be collected from a victim of sexual assault. Describe in brief about preservation and transport of those samples to a Forensic Science Laboratory.
04. Describe/Enumerate the role of blood grouping in Forensic Medicine/ Science.
05. What are trace evidences ? Describe in brief the importance of hair in crime detection.
06. What are modern methods for Crime detection ? Describe in brief about any one.
07. enumerate the role of X-rays in Forensic Medicine.
08. How will you investigate a case of suicidal hanging ?
09. What the entire factor that affects the damaging power of a bullet ? Describe in brief about primary and secondary cavitations.

10. Discuss the principles of Gas Chromatograph. Describe the advantage of Mass Spectrophotometry (GC-MS) in addition to Gas Chromatograph. Enumerate the poisons that can be detected by GC-MS.