

QP CODE: 21100050	Reg No	:	
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# UNDERGRADUATE (CBCS) EXAMINATION, FEBRUARY 2021 Fifth Semester

(Offered by the Board of Studies in Chemistry)

## Open Course - CH5OPT03 - FORENSIC SCIENCE

2017 Admission Onwards 63BBF194

Time: 3 Hours Max. Marks: 80

#### Part A

Answer any **ten** questions. Each question carries **2** marks.

- 1. Define poison. Give an example.
- Mention any two toxic heavy metals present in a sea food. What are their effects in human body?
- 3. How does the presence of arsenic in hair help to detect the period of poisoning?
- What is PETN? Give its use.
- 5. What are timed bombs?
- 6. Write any two inherent signs of forged signatures.
- Name the stone that is mainly used instead of diamond.
   Write one method to find out the authenticity of diamond.
- 8. What is meant by search and rescue dogs?
- 9. How many paint coatings are used in the automotive finishing system for steel?
- 10. Write the full form of AIDS. How can it be prevented?
- 11. What is external ballistics? How it differ from internal ballistics?
- 12. What are the factors affecting the bullets flight?

 $(10 \times 2 = 20)$ 

#### Part B

Answer any **six** questions.

Each question carries 5 marks.



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- 13. How can you identify the poisons from the postmortem appearance of internal organs?
- Explain the reasons for accidental explosion. What are the precautions to be taken to avoid it?
- 15. Explain the distance determination of the gunshot.
- What do you mean by signature forgery?How simulated forgery differ from traced forgery?
- 17. What is BIS hallmarking? Write briefly any one method to detect the purity of gold.
- 18. Write short notes on tyre marks and shoe prints.
- 19. How does forensic examiner collect and preserve fibre evidence?
- 20. How do you analyse the metabolites using Gas Chromatography and Mass Spectrometry?
- 21. Write a short note on the chemistry of combustion.

 $(6 \times 5 = 30)$ 

### Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Explain the general treatments and antidotes provided for a poisoning case.
- 23. Explain the detection of spill of toxic chemicals.
- 24. Explain the use of AAS in alloy analysis to detect counterfeit coins.
- 25. Hair evidence is important in the forensic science. Explain.

 $(2 \times 15 = 30)$ 

