# STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI-86 (For candidates admitted during the academic year 2011 –12 & thereafter)

**SUBJECT CODE: 11CH/UI/FC23** 

# B.A./B.Sc./B.Com. / B.V.A./ B.C.A. / B.S.W. DEGREE EXAMINATION APRIL 2015

			REG.NO	REG.NO				
$\mathbf{CC}$	OURSE : INDEPEN	DENT ELECTIVE						
PA	PER : FORENSI	C CHEMISTRY						
TIME : 30 MINU		TES		MAX.MARKS: 30				
		SECTION -	A	(30x1=30)				
ANSWER ON THE QUESTION PAPER ITSELF.								
Answer all the questions.								
I	Choose the correct ans	swer:						
1.	RDX is an example for a. water b. mil	-		. aerosol				
2.	An example of an inorganic poison is  a. sulphuric acid b. CCl <sub>4</sub> c. benzene d. opium							
3.	Blood stain is traced by a. DNA profiling b. fo		c. forensic photogr	aphy d. Holography				
4.	Carbonmonoxide isa. Inorganic poison		c. scavenger	d. antidote				
5.	Holography usesa. laser	in taking photogr b. UV	c.IR	d. Visible				
6	DNA profiling is associated with							
	a. Voice analysisis not related	b.odour analysis		d.anthropometry				
	a. Eye witness		c. confessions	d. approval				
8.	The property of glass use a. refractive index		c. texture	d. viscosity				
II	Fill in the blank:							
9.	9. TNT is an example for explosive.							
10.	10. The antidote for Pb poisoning is							
	11. Counterfeit currency is detected using radiations.							
12. Carbamates acts as a								
	13. Paternity of an offender to a crime is matched with .							

/2/ 11CH/UI/FC23

#### **III** State whether true or false:

- 14. Finger print of twins is identical.
- 15. Arson is malicious fire.
- 16. Thallium is a suspected human carcinogen.
- 17. Blood grouping help in the identity of a person who have committed the crime.
- 18. Neutron Radiography is used in crime detection.
- 19. X rays are used in detecting genuine coins.
- 20. Speed detection devices are commonly used in our country.
- 21. Bones indicates chronic metallic poisoning.

### IV Answer in one or two sentences:

- 22. Mention any two source material for DNA profiling.
- 23. What are detective dyes?
- 24. Give the symptoms of arsenic poisoning.
- 25. Mention the applications of IR rays in crime detection.
- 26. Define Forensic photography
- 27. What is IED?
- 28. Give the trace evidence for soil.
- 29. List the primary duties of a forensic expert in a court of law.
- 30. What is Holography?

\*\*\*\*\*

## STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI-86 (For candidates admitted during the academic year 2011 –12 & thereafter)

SUBJECT CODE: 11CH/UI/FC23

## B.A./B.Sc./B.Com. / B.V.A./ B.C.A. / B.S.W. DEGREE EXAMINATION APRIL 2015

COURSE : INDEPENDENT ELECTIVE PAPER : FORENSIC CHEMISTRY

TIME : 2½ HOURS MAX. MARKS: 70

### **SECTION - B**

### **Answer any FIVE questions:**

(5x 6 = 30)

- 1. What are the functions of forensic Laboratory?
- 2. What is physical evidence? How are they classified?
- 3. Give the symptoms and antidote for the following poisoning.
  - i) CO ii) barbiturates iii) Cyanide
- 4. What are the characteristics of accidental fire?
- 5. What is the significance of finger prints, foot prints and palm prints?
- 6. Write short notes on DNA profiling. Discuss its application as physical evidence to detect crime.
- 7. How is blood stain evidence for crime investigation preserved?

#### **SECTION - C**

### **Answer any TWO questions:**

(2x 20 = 40)

- 8. a) Discuss the scientific methods used in crime investigation
  - b) Discuss the classification of explosives with suitable examples. (10+10)
- 9. What is trace evidence? How do glass, soil and paint act as trace evidence? Explain in detail.
- 10. a) What is the purpose of forensic Chemistry?
  - b) How is a crime scene processed?
  - c) What is the relevance of forensic finger printing? (4+10+6)

\*\*\*\*\*