

# GOVERNMENT OF KERALA DIRECTORATE OF MEDICAL EDUCATION CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR EXAMINATION MAY 2023

DCSST-F-I-MAY-2023

Time 2 hrs		hrs <b>Part 1 paper 1</b>	Max 50Marks
(Answer Section A , B & C separately and draw diagrams wherever necessary)			
		BASIC ANATOMY, PHYSIOLOGY AND PATHOLOGY	
		SECTION A – ANATOMY	
I.	Sho a.	ort Essay Name the parts of the urinary system Describe the anatomy of the kidney in detail	(1x5=5)
II.	Write Short Notes on		(5x2=10)
	a.	Simple epithelium	
	b.	Stomach	
	c.	Right atrium	
	d.	Muscle tissue	
	e.	Structure of neuron	
111.	Fill	up	(5x1=5)
	a.	is the connective tissue cell producing fibers and matrix	
	b.	Cells of stomach produce Hydrochloric acid	
	c.	The covering of heart is called	
	d.	Is the largest part of brain	
	e.	Canals are seen in bone tissue	

# SECTION B-PHYSIOLOGY

I.	S	hort Essay	(2+3=5)
	а	. Write the steps and mechanism of urine formation.	
П.	Sh	ort Notes	(5x2=10)
	a.	Functions of gastric juice	
	b.	Hormones of anterior pituitary gland	
	с.	Нурохіа	
	d.	Determinants of Blood pressure	
	e.	Actions of Oestrogen	
III.	Fil	ll in the blanks	(5x1=5)
	a.	Two hormones of pancreas	
	b.	Normal respiratory rate	
	с.	Two functions of surfactant	
	d.	Normal RBC count in males	
	e.	Two functions of Saliva	
		SECTION C - PATHOLOGY	
١.	Write short notes on (5x2		(5x2=10)
	a.	Virchow triad	
	b.	Mention the names of the routine hematological tests done in com	plete
		Blood count	
	с.	Define inflammation	
	d.	What are the pathways of spread of malignant tumors?	

e. Ghon complex with diagram

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#### GOVERNMENT OF KERALA DIRECTORATE OF MEDICAL EDUCATION CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR EXAMINATION MAY 2023

CSST-F-II-MAY-2023

Time 2 hrs

#### Part 1 paper 1I

Max :50 Marks

(5x5=25)

(5x2=10)

(5x1=5)

(Draw diagrams wherever necessary)

# **BASIC MICROBIOLOGY**

I. Essay: (2+2+4+2=10)
 a. Enumerate the viruses that are transmitted through blood. Classify Hepatitis viruses. Discuss in detail about laboratory diagnosis of Hepatitis B. How will you manage needle stick injury?

#### II. Short answer questions:

- a. Anaerobic culture methods
- b. Bacterial growth curve
- c. Atypical Mycobacteria
- d. Bacterial toxins
- e. Standard Precautions

# III. Write Short notes on :

- a. Coagulase negative Staphylococci
- b. Bacterial spore
- c. Candidiasis
- d. Koch's postulates
- e. Passive immunity

### IV. Name the following

- a. Staining technique used to demonstrate bacterial capsule
- b. Name two bacteria causing food poisoning
- c. Which is the definitive host of malarial parasite
- d. Name two nonsuppurative infections cuased by Streptococcus pyogenes
- e. Name two prion disease in humans.





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CSST-F-III-MAY 2023

Time 2 hrs

# Part 1 paper III

Max :50 Marks

(draw diagrams wherever necessary)

# STERILIZATION AND DISINFECTION

Essay $(1+2+3+4=10)$				
a. Define sterilization? Classify sterilization methods. Explain the principle and				
working of autoclave. Discuss Sterilization control in detail.				
Short answer questions:	(5x5=25)			
-				
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c. Spaulding's classification				
d. Reprocessing of prion contaminated devices				
e. Advantages and disadvantages of ETO sterilizer				
Write Short notes on :	(5x2=10)			
a. Ultrasonic cleaning				
b. Characteristics of an ideal disinfectants				
c. Cold sterilization				
d. Inspissation				
e. Different phases of Low temperature gas plasma sterilizer				
	$(5 \times 1 - 5)$			
Name the following	(5x1=5)			
a. Agent used for disinfecting thermometer	(3x1=3)			
-	(3x1=3)			
a. Agent used for disinfecting thermometer	(3x1=3)			
	<ul> <li>a. Define sterilization? Classify sterilization methods. Explain working of autoclave. Discuss Sterilization control in detail. Short answer questions:</li> <li>a. Testing of disinfectants</li> <li>b. Glutaraldehyde</li> <li>c. Spaulding's classification</li> <li>d. Reprocessing of prion contaminated devices</li> <li>e. Advantages and disadvantages of ETO sterilizer</li> <li>Write Short notes on :</li> <li>a. Ultrasonic cleaning</li> <li>b. Characteristics of an ideal disinfectants</li> <li>c. Cold sterilization</li> <li>d. Inspissation</li> <li>e. Different phases of Low temperature gas plasma sterilizer</li> </ul>			

e. Disinfectant used in blood spill management.

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CSST-F-IV-MAY-2023

Time 2 hrs

# Part 1 paper 1V

Max :50 Marks

(Answer Section A , B, C & D separately and draw diagrams wherever necessary)

# ENGINEERING ASPECT, INVENTORY MANAGEMENT, CSSD ADMINISTRATION, COMPUTER FUNDAMENTALS

# **SECTION -A**

I.	V	Vrite Short Notes	
	a.	Control of,,, and is defined as Air	
		Conditioning.	(4)
	b.	is the unit of Temperature in SI System	(1)
	c.	is the unit of Heat in SI System	(1)
	d.	, , and are the main advantages of CSSD	(3)
	e.	UV stands for	(1)

# **SECTION –B**

I.	Write short notes on		(5x2=10)
	a.	Define inventory	
	b.	Write a brief note on case cart system.	
	c.	Define load control	
	d.	Define JIT	
	e.	What are the problems of inventory control?	
II.	Fill up (5		(5x1=5)
	a.	is a condition that occurs when inventory items needed to pro-	ovide
		health care to patients are unavailable.	
	b.	Is the full form of PAR	
	c.	is the process designed to reduce harm to the environment, the	ere by
		supporting long term ecological balance.	
	d.	is the symbol for reference number in package.	

e. ..... system enhance infection prevention practices.

# SECTION C

I.	W	rite short notes on	(5x2=10)
	a.	Draw the diagram of workflow of CSSD.	
	b.	Briefly describe the employees responsibilities in CSSD	
	c.	List down the qualities of a first aid	
	d.	Define grievance redressal.	
	e.	Briefly explain the case card system.	
II.	a a. b. c.	<ul> <li>Il in the blanks</li> <li> is an infection that develops in a patient after third day of he admission.</li> <li> is the first and immediate assistance given to any person sufferinjury.</li> <li> area is where soiled equipments are received from user departr</li> <li> is the full form of IFU</li> <li> is a list of specific supplies, utensils and instruments for a sprocedure.</li> </ul>	ring form nent.
		SECTION – D	
I.	A	nswer all the questions	(5x2=10)
	a.	. Different types of Operating Systems with examples	
	b	. Explain Local Area Network	

- c. Explain Hardware
- d. Explain Health management information system in hospitals.
- e. Advantages and disadvantages of computers.

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#### **GOVERNMENT OF KERALA** DIRECTORATE OF MEDICAL EDUCATION **CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR EXAMINATION MAY 2023** DCSST-S-I-MAY-2023

Time 2 hrs	Part II paper 1	Max 50Marks
	(Draw diagrams wherever necessary)	
	PROCESSING OF MEDICAL DEVICES	

- Ι. Essay (2+4+4=10)What is IUSS? Explain the procedure for IUSS? Describe the role of CS technician in handling IUSS?
- Short Answers П.
  - a. Write general guidelines for endoscope decontamination
  - b. Write uses of any two powered surgical instruments with example.
  - c. Explain the inspection and handling of complex surgical instruments.
  - d. Explain the role of CS technician in processing of medical devices.
  - e. Describe single use devices with example.
- III. Short Notes
  - a. Endoscope
  - b. Validation
  - c. Mobile patient care equipment
  - d. Cleaning
  - e. Dot marking system
- IV. Fill up
  - a. ..... are chemicals that hold hard water minerals in solution and prevent soap or detergents from reacting with minerals.
  - b. ..... is waste containing infections agents that presents a risk to human health.
  - c. Expand AER
  - d. Parellel grooves in jaws of surgical instruments are called .....
  - e. Instruments used to control flow of blood is .....

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(5x1=5)

(5x5=25)

(5x2=10)

# **GOVERNMENT OF KERALA** DIRECTORATE OF MEDICAL EDUCATION **CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR EXAMINATION MAY 2023** DCSST-S-II-MAY-2023

I. (2+6+2=10)Essay: a. What is standard precaution? Discuss in detail the various components of standard precautions. How will you manage needle stick injury II. Short answers (5x5=25)Transmission based precautions a. b. Post exposure prophylaxis of Hepatitis B c. Biomedical waste management d. Infection control measures in dialysis e. Hospital infection control committee Write Short notes on : a. Doffing b. Modes of transmission of HAI c. MRSA d. Steps of hand hygiene e. What is care bundle approach? IV. One word questions (5x1=5)a. Disinfectant used for cleaning patient care area is ..... b. The ideal antiseptic for inserting central line is ..... c. For preventing MRSA ..... precaution has to be taken d. Most commonly used method for treating biomedical waste is .....

e. Heat stable surgical instruments are sterilized by .....

. . . . . . . . . . . . . . . . . . . .



Time 2 hrs

# Part I1 paper 1I

(draw diagrams wherever necessary)

### HEALTH CARE ASSOCIATED INFECTION & INFECTION CONTROL PROCEDURES

- - III.

(2x5=10)

Max :50 Marks

### **GOVERNMENT OF KERALA** DIRECTORATE OF MEDICAL EDUCATION **CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR EXAMINATION** MAY 2023

DCSST-S-III-APRIL 2022

Max:50 Marks

(draw diagrams wherever necessary)

#### QUALITYASSURANCE IN CSSD PROCESS

Part II paper III

- I. Essay (2+4+4=10)Define quality control? Explain the importance of quality assurance in CSSD? Explain the measures to maintain quality in Central Sterile service processing areas?
- II. Short answer questions:
  - a. Elements of quality assurance
  - b. Role and responsibility of CS technician in maintaining quality assurance.
  - c. Methods of analysis of quality concern
  - d. Explain indicators of sterilization control
  - e. Describe steps in developing quality control process.
- III. Write Short notes on :
  - a. Quality assurance
  - b. Documentation
  - c. Biological indicators
  - d. IPC
  - e. Quality improvement
- IV. Fill Up
  - a. Quality process that focuses on developing and deleting near perfect product and services.....
  - b. TQM is .....
  - c. Probability of viable microorganism present on product even after sterilization is
  - d. Uniform standards of defining basic parameters for processes, product and services are .....
  - e. The act of granting power to employees so they may make decisions within their areas of responsibility is .....

. . . . . . . . . . . .

Time 2 hrs

(5x1=5)

(5x5=25)

(5x2=10)

#### **GOVERNMENT OF KERALA DIRECTORATE OF MEDICAL EDUCATION CENTRAL STERILE SERVICE TECHNOLOGY (DCSST) COURSE REGULAR** EXAMINATION MAY 2023

DCSST-S-IV-MAY-2023

Max :50 Marks

(draw diagrams wherever necessary)

Part I1 paper 1V

# PACKAGING, STORAGE & SUPPLY

#### ESSAY I. (2+4+4=10)

What is wrapping techniques? Explain different wrapping techniques? What are the general guidelines while wrapping a sterile pack?

II.	Short Answers (5	5x5=25)	
	a. Explain advantages and disadvantages of rigid container systems		
	b. Explain package labeling		
	c. Describe methods to maintain the sterility of packed instruments.		
	d. What are the requirements of assembly and packaging		
	e. Explain reusable packaging materials.		
III.	Short Notes (5	5x2=10)	
	a. Assembly area		
	b. Event related sterility		
	c. Wet packs		
	d. Tamper evident seals		
	e. Chemical indicators		
IV.	Fill Up (	(5x1=5)	
	a. One example of chemical indicator is		
	b. Scissors with tungsten carbide cutting edges are usually identified by		
	c. Temperature of the assembly area should be maintained between		
	d. Moisture of package contents is a very critical issue for all types of sterilization	ation	
	except		

e. The maximum humidity level for sterile storage is .....

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Time 2 hrs