

Model Question Paper -1 with effect from 2020-21(CBCS Scheme)

USN

--	--	--	--	--	--	--	--	--	--

Fifth Semester B.E. Degree Examination Clinical Instrumentation

TIME: 03 Hours**Max. Marks: 100**

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Draw diagrams wherever necessary.

Module – 1			
Q.1	(a)	What is ECG? Discuss the characteristics of normal ECG	10 mks
	(b)	Describe the arrhythmias with respect to the abnormal sinus rhythm	10 mks
OR			
Q.2	(a)	Discuss the different types of premature contractions.	10 mks
	(b)	Explain the abnormalities due to impulse conduction blocks.	10 mks
Module – 2			
Q.3	(a)	With a neat diagram explain the cardiac catheterization laboratory	10 mks
	(b)	Explain the types of exercise stress testing methods.	10 mks
OR			
Q.4	(a)	Describe the various units of the arrhythmia monitor.	12 mks
	(b)	Explain the principle and working of the pulse oximeter.	08 mks
Module – 3			
Q.5	(a)	Explain the errors of refraction and their treatment.	12 mks

	(b)	Discuss the Snellen's chart test	08 mks
OR			
Q.6	(a)	Briefly explain about the spectacles and contact lens.	12 mks
	(b)	Write short note on aqueous humor production and drainage	08 mks
Module – 4			
Q.7	(a)	Explain the principle and procedure of retinoscopy	10 mks
	(b)	Write a note on gonioscopy.	10 mks
OR			
Q.8	(a)	Briefly discuss different types of tonometers.	12 mks
	(b)	Explain the technique of fundus fluorescein angiography.	08 mks
Module – 5			
Q.9	(a)	Define cataract. Discuss the technique of intracapsular cataract extraction.	12 mks
	(b)	Briefly discuss the application of lasers in ophthalmology.	08 mks
OR			
Q.10	(a)	Describe the techniques of intraocular lens implantation.	10 mks
	(b)	Discuss the types and techniques of vitrectomy.	10 mks

Table showing the Bloom's Taxonomy Level, Course Outcome and Programme Outcome					
Question		Bloom's Taxonomy Level attached	Course Outcome	Programme Outcome	
Q.1	(a)	L2	CO1	1,12	
	(b)	L2	CO1	1,12	
Q.2	(a)	L2	CO1	1,12	
	(b)	L2	CO1	1,12	
Q.3	(a)	L2	CO2	1,12	
	(b)	L2	CO2	1,12	
Q.4	(a)	L2	CO2	1,12	
	(b)	L2	CO2	1,12	
Q.5	(a)	L2	CO3	1,12	
	(b)	L2	CO3	1,12	
Q.6	(a)	L2	CO3	1,12	
	(b)	L2	CO3	1,12	
Q.7	(a)	L2	CO5	1,12	
	(b)	L2	CO5	1,12	
Q.8	(a)	L2	CO5	1,12	
	(b)	L2	CO5	1,12	
Q.9	(a)	L2	CO4	1,12	
	(b)	L2	CO4	1,12	
Q.10	(a)	L2	CO4	1,12	
	(b)	L2	CO4	1,12	
Lower order thinking skills					
Bloom's Taxonomy Levels	Remembering(knowledge): L_1		Understanding Comprehension): L_2	Applying (Application): L_3	
	Higher order thinking skills				
	Analyzing (Analysis): L_4		Valuating (Evaluation): L_5		Creating (Synthesis): L_6



Model Question Paper 2 with effect from 2020-21(CBCS Scheme)

USN

--	--	--	--	--	--	--	--	--	--

Fifth Semester B.E. Degree Examination Clinical Instrumentation

TIME: 03 Hours

Max. Marks: 100

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Draw diagrams wherever necessary.

Module – 1			
Q.1	(a)	What is phonocardiography? Discuss the causes, duration and frequencies of the normal heart sounds.	10 mks
	(b)	Define fibrillation. Briefly explain the atrial and ventricular fibrillation.	10 mks
OR			
Q.2	(a)	Discuss the following: i) Atrial flutter ii) Cardiac arrest	10 mks
	(b)	Describe the types of valvular lesions.	10 mks
Module – 2			
Q.3	(a)	With a neat block diagram explain the fetal abdominal electrocardiography.	10 mks
	(b)	Define oximetry. Explain the principles of reflection and transmission oximetry.	10 mks
OR			
Q.4	(a)	Discuss the data recording system of Holter monitor	12 mks
	(b)	With neat diagram explain the working of an ear oximeter.	08 mks
Module – 3			
Q.5	(a)	Briefly explain the anatomy of the eye with a neat diagram.	12 mks

	(b)	Describe the Maddox rod and Maddox wing tests.	08 mks
OR			
Q.6	(a)	Discuss the different techniques of refractive surgery.	12 mks
	(b)	Explain the physiology of vision.	08 mks
Module – 4			
Q.7	(a)	Describe keratometry and its types.	10 mks
	(b)	Discuss the working principle of different types ophthalmoscopes.	10 mks
OR			
Q.8	(a)	Explain the optics and illumination methods of slit lamp examination.	12 mks
	(b)	Describe the technique of electro-oculography.	08 mks
Module – 5			
Q.9	(a)	Discuss the surgical procedures for glaucoma.	10 mks
	(b)	With neat diagram explain the types of cryoprobes and cryotherapy in ophthalmology	10 mks
OR			
Q.10	(a)	Explain the technique of extracapsular cataract extraction.	10 mks
	(b)	Describe about vitreous hemorrhage	10 mks

Table showing the Bloom's Taxonomy Level, Course Outcome and Programme Outcome					
Question		Bloom's Taxonomy Level attached	Course Outcome	Programme Outcome	
Q.1	(a)	L2	CO1	1,12	
	(b)	L2	CO1	1,12	
Q.2	(a)	L2	CO1	1,12	
	(b)	L2	CO1	1,12	
Q.3	(a)	L2	CO2	1,12	
	(b)	L2	CO2	1,12	
Q.4	(a)	L2	CO2	1,12	
	(b)	L2	CO2	1,12	
Q.5	(a)	L2	CO3	1,12	
	(b)	L2	CO3	1,12	
Q.6	(a)	L2	CO3	1,12	
	(b)	L2	CO3	1,12	
Q.7	(a)	L2	CO5	1,12	
	(b)	L2	CO5	1,12	
Q.8	(a)	L2	CO5	1,12	
	(b)	L2	CO5	1,12	
Q.9	(a)	L2	CO4	1,12	
	(b)	L2	CO4	1,12	
Q.10	(a)	L2	CO4	1,12	
	(b)	L2	CO4	1,12	
Lower order thinking skills					
Bloom's Taxonomy Levels	Remembering(knowledge): L_1		Understanding Comprehension): L_2	Applying (Application): L_3	
	Higher order thinking skills				
	Analyzing (Analysis): L_4		Valuating (Evaluation): L_5	Creating (Synthesis): L_6	

