# **Question Paper**

Exam Date & Time: 01-Jun-2019 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

### SIXTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - MAY/JUNE 2019 SUBJECT: BCVT 302 - CLINICAL APPLICATIONS OF ECHO (2016 SCHEME) Saturday, June 01, 2019 (14.00 - 17.00)

Marks: 100	D	uration: 180 mins.
Answer all the 1A)	<b>questions.</b> Describe embryology, pathophysiology and clinical outcome in complete transposition of grea arteries.	at (20)
1B)	Describe various echocardiographic methods of left ventricular systolic function assessment.	(20)
2A)	Explain brief echocardiographic assessment in aortic regurgitation.	(10)
2B)	Describe classification and echocardiographic findings of hypertrophic cardiomyopathy.	(10)
3A)	Describe myocardial contrast echocardiography.	(5)
3B)	Describe ventricular dependence in brief.	(5)
3C)	Describe echocardiography in takotsubo cardiomyopathy.	(5)
3D)	Explain normal and abnormal patterns of pulmonary valve m-mode.	(5)
3E)	Describe PISA method.	(5)
3F)	Describe echocardiographic findings in ALCAPA.	(5)
4A)	Define perimembranous VSD.	(2)
4B)	Define contrast resolution.	(2)
4C)	Enumerate any two uses of tissue Doppler imaging.	(2)
4D)	Enumerate any two contra indications for TEE.	(2)
4E)	Define annualr paradoxus.	(2)

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# **Question Paper**

Exam Date & Time: 06-Jun-2019 (02:00 PM - 05:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

### SIXTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - MAY/JUNE 2019 SUBJECT: BCVT 304 - CARDIAC CATH AND INTERVENTION (2016 SCHEME) Thursday, June 06, 2019 (14.00 - 17.00)

Marks: 100	Duration:	180 mins.				
Answer all the questions.						
1A)	Explain LV angiography in the assessment of HOCM. Discuss the percutaneous transluminal septal myocardial ablation in detail.	(20)				
1B)	Write the indications, contraindications, procedure and complications in primary PCI. Explain the role of thrombus aspiration.	(20)				
2A)	Discuss the strategies in left main stenting.	(10)				
2B)	Write a note on IVC filter and its role in peripheral artery disease.	(10)				
3A)	Write the ACC/AHA guidelines for balloon mitral valvotomy.	(5)				
3B)	Write the pitfalls of non-invasive pressure measurements.	(5)				
3C)	Write a note on kissing stent technique in bifurcation stenting.	(5)				
3D)	Explain pericardiocentesis in detail.	(5)				
3E)	Discuss the femoral artery puncture site complications.	(5)				
3F)	Explain left heart catheterization.	(5)				
4A)	Define cutting balloons.	(2)				
4B)	Mention the properties of coronary catheters.	(2)				
4C)	Define type A coronary lesion.	(2)				
4D)	Define loss of capture and sensing.	(2)				
4E)	Give the Duke classification for bifurcation lesion.	(2)				

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# **Question Paper**

Exam Date & Time: 10-Jun-2019 (02:00 PM - 04:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

#### SIXTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - MAY/JUNE 2019 SUBJECT: BCVT 306 - CLINICAL CARDIOLOGY (2016 SCHEME) Monday, June 10, 2019 (14.00 - 16.00)

Marks: 50		Duration: 120 mins.			
Answer all the questions.					
1)	Explain clinical evaluation of palpitation in brief.	(10)			
2)	Describe normal and abnormal pattern of jugular venous pulse.	(10)			
3A)	Describe central cyanosis.	(5)			
3B)	Describe diastolic heart sounds.	(5)			
3C)	Enumerate etiology of continuous murmur.	(5)			
3D)	Enumerate X-ray findings in left atrial enlargement.	(5)			
4A)	What is Triad of myxoma?	(2)			
4B)	Define pulse.	(2)			
4C)	Define phlebotomy.	(2)			
4D)	Enumerate any two causes for single S2.	(2)			
4E)	Define pulmonary plethora. Give two examples.	(2)			

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