Question Paper

Exam Date & Time: 04-Dec-2018 (02:00 PM - 04:00 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - DECEMBER 2018
SUBJECT: BCVT 301 - BASICS IN CARDIAC CATH AND HARDWARES
(2016 SCHEME)
Tuesday, December 04, 2018 (14.00 - 16.00)

Answer All Questions.

Marks: 50 **Duration: 120 mins.**

1)	Discuss the right and left heart pressure wave forms with a labelled diagrams.	(10)
2)	Explain the valve area assessment in cardiac catheterization using Gorlin formula.	(10)
3A)	Thrombolytic agents in cardiac cath	(5)
3B)	Write the causes of step up of oxygen saturation in right atrium.	(5)
3C)	Write a note on image intensifier with a labelled diagram.	(5)
3D)	Differentiate between stochastic and deterministic effects.	(5)
4A)	Mention the elements of surgical asepsis.	(2)
4B)	Define PVR and the formula for the same.	(2)
4C)	Define TIDS.	(2)
4D)	Draw ASD device with labelling.	(2)
4E)	Name four beta blockers.	(2)

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Question Paper

Exam Date & Time: 07-Dec-2018 (02:00 PM - 05:00 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - DECEMBER 2018
SUBJECT: BCVT 303 - MYOCARDIAL, PERICARDIAL AORTIC AND ISCHEMIC HEART DISEASES
(2016 SCHEME)
Friday, December 07, 2018 (14.00 - 17.00)

Answer all questions.

Marks: 100 **Duration: 180 mins.**

1A)	Explain two dimensional and Doppler methods for assessment of diastolic function.	(20)
1B)	Explain anatomical variants, presentation, clinical findings, diagnostic modalities and treatment strategy of HCM.	(20)
2A)	Describe LV volume assessment by various methods.	(10)
2B)	Explain Differential diagnosis of prolonged chestpain.	(10)
3A)	Write a short note on hemochromatosis.	(5)
3B)	Explain echo findings of LV noncompaction.	(5)
3C)	Explain LA myxoma.	(5)
3D)	Explain $GpII_bIII_a$ inhibitor.	(5)
3E)	Write ECG findings in pericardial tamponade.	(5)
3F)	Write different echo findings of CCP.	(5)
4A)	Define normal and abnormal eccentricity index.	(2)
4B)	Define Prinzmetal angina.	(2)
4C)	Define Mc Connell sign.	(2)
4D)	Define strain and strain rate.	(2)
4E)	Write two echocardiographic findings of Absent pericardium.	(2)

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Question Paper

Exam Date & Time: 13-Dec-2018 (02:00 PM - 05:00 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - DECEMBER 2018
SUBJECT: BCVT 307 - VALVULAR HEART DISEASE
(2016 SCHEME)
Thursday, December 13, 2018 (14.00 - 17.00)

Marks: 100 **Duration: 180 mins.**

Answer all the questions.

1)	Explain etiology, pathophysiology and clinical findings of mitral stenosis.	(20)
2)	Explain pathophysiology and echocardiographic assessment in aortic regurgitation in detail.	(20)
3)	Describe low flow low gradient AS in brief.	(10)
4)	Describe the etiopathogenesis of infective endocarditis.	(10)
5A)	Describe severity assessment of aortic stenosis by echocardiography.	(5)
5B)	Describe the severity assessment of mitral regurgitation by echocardiography.	(5)
5C)	Explain organic tricuspid regurgitation in detail.	(5)
5D)	Describe the features of bio prosthetic valves	(5)
5E)	Enumerate the ACC/AHA indications for mitral valve replacement in mitral regurgitation.	(5)
5F)	Describe the echocardiographic evaluation of pulmonary regurgitation.	(5)
6A)	Write the clinical features of rheumatic arthritis.	(2)
6B)	Define billiard ball effect.	(2)
6C)	Write any two limitations of PHT.	(2)
6D)	Define Nyquist limit.	(2)
6E)	Write any two uses of mechanical prosthetic valves.	(2)

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Question Paper

Exam Date & Time: 11-Dec-2018 (02:00 PM - 05:00 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. CARDIOVASCULAR TECHNOLOGY DEGREE EXAMINATION - DECEMBER 2018
SUBJECT: BCVT 305 - CONGENITAL HEART DISEASES II
(2016 SCHEME)
Tuesday, December 11, 2018 (14.00 - 17.00)

Marks: 100 **Duration: 180 mins.**

Answer all the questions.

1A)	Describe embryology, Pathophysiology and components of TOF.	(20)
1B)	Describe embryology, associated anomalies and clinical presentation of congenitally corrected TGA.	(20)
2A)	Describe clinical presentation, ECG and Xray findings in DORV.	(10)
2B)	Describe Classification and ECG findings in Tricuspid atresia.	(10)
3A)	Classify MAPCAs	(5)
3B)	Explain the classification of DORV in brief.	(5)
3C)	Describe the echocardiographic evaluation of interrupted aortic arch.	(5)
3D)	Describe PA banding in detail.	(5)
3E)	Explain clinical presentation, ECG, Xray findings in Truncus arteriosus	(5)
3F)	Describe ECG and echocardiographic findings in ALCAPA.	(5)
4A)	Write the Xray findings in cardiomegaly.	(2)
4B)	Write the ECG findings in CoA.	(2)
4C)	Enumerate any two conditions with admixture physiology.	(2)
4D)	Define straddling.	(2)
4E)	Write the consequences of premature closure of ductus in fetus.	(2)

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