

RIMS Campus, Bariatu, RANCHI 834009

Tele-Fax:0651-2544027 E-mail: jspcranchi@gmail.com

Basics of Computer (Practical)

Module 1: Introduction to Microsoft Word

Type a text of document save the document. Align the text with different formats. Align the text with different formats using Microsoft Word. Inserting a table ensuring Proper alignment of the table using MS word.

Module 2: Microsoft Power Point

Preparing a slide show with transition, animation and sound effect using MS – Power point. Customizing the slide show by inserting pictures and tables in the slides using MS – Power Point.

Module 3: Introduction to the Internet

Create an e – mail account. Use the internet to search for a subject of interest.

Theory Paper II (100 Marks)

Diploma in Cath. Lab. Technician

Part A (50 marks)

1. Electrocardiography (ECG)

- (a)ECG Machine
 - (i)knowledge of ECG Machine and its different compartments
 - (ii) Operation and Maintenance of ECG machine
 - (iii) Identification of basic defects and repair
- (b) Electrocardiography
 - (i)Electrophysiology
 - (ii) Einthoven's Law
 - (iii) 12 lead System & Standard limbs & Proper technique of its application
 - (iv) Recording of ECG
 - (v) Removal of leads
 - (vi) Interpretation of Normal and Abnormal ECG
 - (vii) Calculation of Heart-rate from an ECG tracing
 - (viii) Pitfalls in recording of ECG
 - (ix) Stress ECG Protocol, Procedure, indication and contraindication
- 2. Hemodynamics Monitor and concepts of hemodynamic monitoring, Blood Pressure recording pluse oximeter
- 3. Ventilators
 - (i)Introduction to ventil ators
 - (ii) Indication for use
 - (iii) Modes of ventilation
- 4. Defibrillation
 - (i)Indication of defibrillation use



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- (ii) Procedure
 - (a) direct current show
 - (b) Type Monophasic and biphasic shock
- (iv) Technique and indication of cardioversion
- (v) complication of defrillation
- 5. Medical Ultrasound and Doppler
 - Electrocardigraphic processing and display system
- 6. Radiology
 - (i) Principles of X-ray
 - (ii) Description and recognition of chest X-Ray
 - (iii) Different views of chest for identification of cardiopulmonary structure
 - (iv) Measure to reduce and protect from radiation exposure
- 7. Holter
 - (i) Indruduction to Holter test
 - (ii) Indications
 - (iii) Procedure of Holter test
 - (iv) Precautions to be token during holter testing
 - (v) Principle of Holter recording
 - (vi) Conncections of the Holter recorder
 - (vii) Holter analysis
 - (viii) Guidelines for ambulatory holter

Part B (50 Marks)

- 1. Diseases of Heart
 - (i)Congenital
 - (ii) Rheumatic
 - (iii) Myocardial and Pericardial
 - (iv) Coronary artery diseases
 - (v) Hypertension
 - (vi) Pulmonary thromuboembolism and pulmomary hypertension
 - (vii) Respiratroy failure
- 2. Arterial Blood gases Technique and interpretation
- 3. Hemodynamic monitoring Technique, recognition, indication, complication





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 - (vii) Respiratory failure
- 2. Arterial Blood gases Technique and interpretation
- 3. Hemodynamic monitoring Technique, recognition
- 4. Fluid and electrolytes
- 5. X-Ray imaging in cath lab
- 6. Intra aortic balloon pulsation Indication, Technique and complication
- 7. Cardiac catheterization
 - (i)Introduction
 - (ii) Equipments and catheters
 - (iii) catheter cleaning and packing
 - (iv) setting up cardiac catheter laboratory for diagnostic study
 - (v) Table Movement
 - (vi) Angioshopy X-Ray generating system
 - Image intensifier
 - C-Arm
 - Constant Pressure injector
 - (vii) Transducer
 - (viii) Percentaneous transluminal coronary
 - -Indications contra indications, instrument and Procedure filature
 - (ix) Percutoneous trensluminacl wounery amigo plesty
 - -Indicaion, instrument, contraindication and procedure
 - (x) Precath evaluation with clean list
 - (xi) Post cerliac catheterization management
- 8. Coronary angiographic
 - (i)coronary angiographic catheter
 - (ii) Angiographic views in coronary angiographic
 - (iii) Pre and Post procedural care
- 9. Pacemakers



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- (i)Definition
- (ii) Indication
- (iii) Modes
- (iv) Types temporary & Permanent
- (v) Parts of pacemaker
- (vi) Permanent pacemaker indications contraindication & Procedure
- 10. Basic life support
 - (i)Cardiopulmonary resuscitation
 - (ii)Basic of recognition of Myocardial infarction, arrhythmias and cardiac disturbances

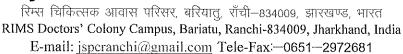
PRATICAL: (100 MARKS) VIVA: (100 MARKS)





झारखण्ड राज्य पारामेडिकल परिषद

Jharkhand State Paramedical Council





(Constituted by the Department of Health, Medical Education & family Welfare, Government of Barkhand vide Notification no-7(A)/Paramed.-11-09/09-356(7A)Ranchi, Dated 17.9.2010)

सभी डिप्लोमा पाठ्यक्रमों का Paper-I, Common रहेगा, जबकी विषयवार Paper-II का सिलेबस अलग—अलग रहेगा।