APPENDIX - I (67)

SCHEME AND SYLLABUS OF EXAMINATION FOR THE PURPOSE OF FILLING UP THE POST OF HEMODIALYSIS TECHNICIANS UNDER THE SIKKIM STATE SUBORDINATE ALLIED AND HEALTHCARE SERVICE.

I. The mode of examination and setting-up of question-papers shall be both, i.e., conventional type and objectivestype MCQs in paper I and II. The candidates are required to answer the objective type MCQs in the OMR Sheets and are required to follow the guidelines provided in the OMR Sheet while answering the questions.

II. The subject wise allotment of maximum marks shall be as under:

| Syllabus:- | | |
|---|---|---|
| General English<br>General Knowledge | PAPER I | 50 marks<br>30 marks |
| Main Paper Hemodialysis Techniciancourse | PAPER II | 100 marks |
| TOTAL<br>Viva voce/ interview | | 180 marks<br>20 marks |
| Grand Total | | 200 marks |

III. Syllabus for written examination for Hemodialysis Technicians : -

| Sl. No. | Course | |
|---|---|---|
| 01 | 02 | 03 |
| 01 | | Anatomy & Physiology<br>(normal kidney structure and functions) |
| 02 | | Derangement of kidney functions<br>(aetiology, clinical manifestation, diagnosis of acute and chronic renal failure) |
| 03 | | Dialysis – the concept<br>(Brief history, definition, mechanism) |
| 04 | | Components of Dialysis<br>Access, blood flow, anticoagulant, dialsate) |
| 05 | | Haemodialysis – Basics<br>(Blood circuit: tubing, pump, dialyzer, flow rate, dialysate circuit, concentrates,delivery systems, flow rate) |
| 06 | | Anticoagulation<br>(Heparin, alternatives to Heparin, regional no antigoagulation) |
| 07 | | Vascular access<br>(Temporary, Permanent) |
| 08 | | Dialysis water and water treatment<br>Dialysis and Dialyzer<br>(including reuse) |
| 09 | | Haemodialysis machine |

| | | |
|---|---|---|
| 10 | Complications of Haemodialysis | i). Access related complication<br>ii). Dialyzer related complication<br>iii). Dialysate related complication<br>iv). Anticoagulant related complication<br>v).Machine/Blood Pump associated complication<br>vi).Special type of complication<br>vii).Management of complications<br>viii).Maintenance of hygiene in Dialysis unit<br>ix). Access – core<br>x). Anticoagulation |
| 11 | Doses of Haemodialysis | i). Duration, index, clearance<br>ii). Middle colecules, Ura reduction ration<br>iii). Urea kinetic modeling, Dialysis adequacy |
| 12 | Continuous Dialysis | i).Continuous arteiovenous hemofiltration<br>ii).Continuous venovenous hemofiltration<br>iii).Continuous hemoduafiltration<br>iv).Continuous slow hemodialysis<br>v).Component, access, tubing, filter, replacement, fluid, Antigoagulation, flow rate. |
| 13 | Peritoneal Dialysis | i).History, Perotioneal physiology, kinetics technique, catheter,dialysate fluid, insertion procedure, drainage, complication.<br>Continuous peritoneal dialysis procedure, dose. |

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