

[LJ 0816]

AUGUST 2016

Sub. Code: 1332

**B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR
PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS**

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the risk factors, prevention and control of hypertension in a population.
2. Explain the different levels of prevention. Describe the levels of prevention of diabetes.
3. Explain in detail the classification, hazards and segregation of biomedical wastes.

II. Write notes on:

(8 x 5 = 40)

1. Explain the indicators used to measure disease burden in a population.
2. List various routes of disease transmission for communicable diseases and give examples.
3. Describe the methods used for health education of a large group.
4. Describe the risk factors for tuberculosis.
5. Describe types of hospital acquired infections with examples.
6. Disposal of biomedical wastes.
7. Disaster management cycle.
8. Explain screening for non-communicable diseases with an example.

III. Short answers on:

(10 x 3 = 30)

1. Two non-modifiable and two modifiable risk factors for diabetes.
2. Two dietary recommendations for prevention of diabetes.
3. List at least four barriers in health education.
4. World Health Day Theme 2016
5. Name two nutritional programmes at the national level.
6. Define Body Mass Index.
7. List two differences between screening tests and diagnostic tests
8. Examples of water borne diseases.
9. List four disease conditions associated with smoking.
10. Dietary advice for patients with hypertension.

**B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR**

PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the risk factors, prevention and control of chronic kidney disease in a population.
2. Explain the importance, methods, content and barriers to health education regarding chronic non communicable diseases.
3. Classify and describe the nutritional disorders affecting adults in India. Explain the causes for two of these nutritional disorders.

II. Write notes on:

(8 x 5 = 40)

1. Biomedical waste segregation and disposal.
2. Disaster response.
3. Describe advantages and disadvantages of lectures as a method of health education.
4. Describe the risk factors for stroke.
5. Water borne diseases.
6. Obesity and its complications.
7. Occupational hazards faced by health care workers.
8. Secondary prevention of diabetes.

III. Short answers on:

(10 x 3 = 30)

1. What is primary prevention?
2. Top four risk factors for non-communicable diseases.
3. Which is the study design which is followed to test the efficacy of a new drug?
4. Name the epidemiological study design in which incidence of disease in exposed individuals is compared to incidence in unexposed.
5. Define hypertension.
6. Name two chronic respiratory diseases.
7. List two hazards of improper disposal of biomedical wastes.
8. List two examples of diseases spread through direct contact.
9. List four disease conditions associated with unbalanced diets.
10. Name two risk factors for breast cancer.

B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR
PAPER II – COMMUNITY MEDICINE, AND BASIC MEDICAL
ELECTRONICS

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Discuss different phases in the Disaster Management Cycle.
2. Explain basic parts of equipments used in Hemodialysis with Block diagram.
3. Describe the Principles of Health Education

II. Write notes on:

(8 x 5 = 40)

1. Maintenance and care for Hemodialysis.
2. Non-modifiable and modifiable risk factors of Diabetes.
3. Segregation of waste.
4. Health Hazards of health care waste.
5. Prevention of Hepatitis C.
6. Describe the parameters monitored during Dialysis.
7. Explain need for vascular access its types and care.
8. Components of Epidemiology.

III. Short answers on:

(10 x 3 = 30)

1. Directly observed treatment strategy.
2. Application of Glomerular Filtration Rate.
3. Three measures of prevention of Diabetes.
4. Meaning of disaster.
5. Differentiate between Education and Publicity.
6. Use of oral rehydration therapy.
7. Two preventive measures of Severe Acute Respiratory Syndrome.
8. Define Anastomosis.
9. Examples of three manmade disasters.
10. Give any three measures to prevent obesity.

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR

**PAPER II – COMMUNITY MEDICINE AND
BASIC MEDICAL ELECTRONICS**

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Hospital Waste management.
2. Concept of Health and Disease.
3. Describe risk factors, prevention and control of Chronic Kidney disease.

II. Write notes on:

(8 x 5 = 40)

1. Health Screening.
2. Levels of prevention of disease with example of Diabetes.
3. Role of Health Education in non communicable disease.
4. Disaster management cycle.
5. Tools of measurement in Epidemiology.
6. Social factors causing Tuberculosis.
7. Dialysis composition and concentration.
8. Difference between Epidemiology and Clinical Medicine.

III. Short answers on:

(10 x 3 = 30)

1. Write any three risk factors for Respiratory Tract Infections.
2. Urine test for Albumin
3. Incidence and Prevalence.
4. Meaning of Mortality.
5. Three environmental factors leading to Diabetes.
6. Renal Diet.
7. Any three Barriers of Communication.
8. Visual aids for Health Education.
9. Measurement of Body Mass Index.
10. Write about any three causes of Obesity.

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR

**PAPER II – COMMUNITY MEDICINE AND
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Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain contents and principles of health education.
2. What is CRRT? Explain different types of modalities in CRRT.
3. Explain the importance, methods, content and barriers to health education regarding chronic non communicable diseases.

II. Write notes on:

(8 x 5 = 40)

1. Care and maintenance of equipments used in dialysis procedure.
2. Manmade disasters.
3. Various methods of solid waste disposal.
4. On what principle dialysis is done.
5. How priming is done in hemodialysis?
6. Biological transmission of diseases through vectors.
7. Functional parts of hemodialysis machine.
8. Types of dialyzer.

III. Short answers on:

(10 x 3 = 30)

1. Necessity for conductivity check during dialysate preparation.
2. Disaster cycle.
3. Mortality Indicator.
4. What are the parameters monitored during hemodialysis.
5. How dialyzer is reused? How many times can a dialyzer be reused?
6. What are the vascular access site for dialysis?
7. What is predialysis assessment?
8. Audiovisual aids in health education.
9. Epidemiology triad.
10. Define Body mass index.

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR

**PAPER II – COMMUNITY MEDICINE AND
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Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain principle and various functional parts of hemodialysis machine.
2. Define primary health care. Describe in detail about the elements of primary health care.
3. Describe the risk factors, prevention and control of chronic kidney disease in a population.

II. Write notes on:

(8 x 5 = 40)

1. Draw block diagram of basic functional parts in hemodialysis machine.
2. Arteriovenous fistula.
3. What HIV precautions are necessary in a dialysis unit? Can dialyzers for known HIV positive patients be reused?
4. What are the basic steps for dialyzer reuse?
5. Factors affecting infant mortality rate in India.
6. Secondary prevention of diabetes.
7. Occupational hazards faced by health care workers.
8. National water supply and sanitation programme.

III. Short answers on:

(10 x 3 = 30)

1. What are the most significant blood borne pathogens?
2. What are standard precautions in dialysis unit?
3. Reverse osmosis.
4. How is ultra filtration used to remove bacteria and endotoxins?
5. Aims and epidemiology.
6. Triage in disaster management.
7. Risk factors for non communicable diseases.
8. What are the factors affect the diffusion or removal of toxins in dialysis?
9. Multiparameter monitors ins ICU.
10. What is the relationship between the hydrostatic pressure and the ultrafiltration rate?

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR

**PAPER II – COMMUNITY MEDICINE AND
BASIC MEDICAL ELECTRONICS**

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Define malnutrition. Explain the various methods of nutritional status assessment.
2. Explain in detail about hospital waste management.
3. What is vascular access? Explain in detail access site, care and maintenance.

II. Write notes on: **(8 x 5 = 40)**

1. Revised national tuberculosis control programme.
2. Obesity and its complications.
3. Adaptive peritoneal dialysis.
4. Dialysate concentration and its composition.
5. Tools of measurement in epidemiology.
6. Maternal and child health service.
7. Define objective target and goal.
8. Types of peritoneal dialysis.

III. Short answers on: **(10 x 3 = 30)**

1. Define dwell time.
2. Define ultra filtration and Transmembrane pressure.
3. What are the vascular access considerations in pediatrics?
4. Types of catheters used for peritoneal dialysis.
5. Indications for CRRT.
6. Define Oliguria, Azotemia and hyponatremia.
7. Total fertility rate.
8. DOT strategy.
9. Demographic gap.
10. Sporadic diseases.

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR

**PAPER II – COMMUNITY MEDICINE AND
BASIC MEDICAL ELECTRONICS**

Q.P. Code: 801332

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Describe the burden, risk factors and prevention of hypertension.
2. Define epidemiology and list its uses. Classify epidemiological study designs and briefly explain any two.
3. Classify the types of diabetes. List risk factors for diabetes and explain methods of prevention and control for diabetes.

II. Write notes on: **(8 x 5 = 40)**

1. Tertiary prevention.
2. Diet for patients with diabetes.
3. Classification of obesity.
4. Screening for diseases.
5. Social and environmental determinants of health.
6. Universal precautions in hospitals.
7. Explain the classification of hospital wastes and rules for segregation.
8. Multifactorial causation of disease.

III. Short answers on: **(10 x 3 = 30)**

1. Example of an epidemiological triad.
2. Iceberg phenomenon of disease.
3. Salt intake recommendations for healthy adults.
4. Expand DOTS.
5. Name the latest infectious disease outbreak in India in 2018.
6. List four water borne diseases.
7. Name the study design used to test the efficacy of a new vaccine.
8. Name two chronic respiratory diseases.
9. List four effects of alcohol abuse.
10. List four barriers in health communication.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321]

MARCH 2021

Sub. Code: 1332

(AUGUST 2020 EXAM SESSION)

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR (From 2014-2015 onwards)

PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS

Q.P. Code : 801332

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe the burden, risk factors, prevention and control of Tuberculosis.
2. Classify epidemiological study designs and describe the steps in cross-sectional studies.
3. Describe the epidemiology of cardiovascular diseases and list measures for prevention and control of Ischaemic Heart Disease.

II. Write notes on:

(8 x 5 = 40)

1. Define anaemia and describe its causes.
2. Causes of chronic Kidney Disease.
3. Classification of diabetes.
4. Tuberculosis control measures in India.
5. Causes of environmental pollution.
6. List services available at Primary Health Centres.
7. Levels of prevention.
8. Hazards of hospital wastes.

III. Short answers on:

(10 x 3 = 30)

1. List two screening tests for detection of diabetes.
2. List methods of transmission of Hepatitis B.
3. List two reasons to justify screening for hypertension.
4. Social factors that lead to high mortality from infectious diseases.
5. List two notifiable diseases.
6. Dietary advice for prevention of Non-Communicable Diseases.
7. Latent period.
8. Define epidemic and endemic diseases.
9. List two effects of smoking tobacco.
10. List two tests that need to be done annually to detect complications of diabetes.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222]

**FEBRUARY 2022
(AUGUST 2021 EXAM SESSION)**

Sub. Code: 1332

**B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR (From 2014-2015 onwards)
PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS
Q.P. Code : 801332**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Define Malnutrition. Explain the various methods of Nutritional status assessment. What is the impact of Malnutrition in CKD Patients?
2. Discuss the epidemiology, Risk Factors, Prevention and Control of Non Communicative disease.
3. Draw the Disaster Management cycle. Write the Components of Disaster Management.

II. Write notes on:

(8 x 5 = 40)

1. Classification of Hospital Waste Products.
2. Health Screening.
3. Water Quality and Standards.
4. Discuss about the Levels of Prevention.
5. Discuss about Occupational Hazards.
6. Discuss about Iceberg phenomenon of disease.
7. How do you prevent infections in a Hemodialysis Unit?
8. Explain about Advantages & Disadvantages of Screening Programme.

III. Short answers on:

(10 x 3 = 30)

1. How do you prevent Cervical cancer?
2. What is BMI? Name two indicators to measure Obesity.
3. What is meant by changing pattern of disease?
4. Mid day meal Programme.
5. Define Communicable Disease.
6. Direct & Indirect Transmission.
7. Define - Anemia.
8. What are the Hazards of Obesity?
9. Importance of Urine Analysis in diagnosing Renal disease.
10. What is Green house Effect?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 1332

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

B.Sc. DIALYSIS TECHNOLOGY

SECOND YEAR (Regulation from 2014-2015)

PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS

Q.P. Code : 801332

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Define Biomedical waste. Describe in detail about Classification, Segregation and Disposal of Biomedical Waste.
2. Epidemiological determinants, clinical features, management and preventive measures of COVID-19.
3. Define Epidemiology. Discuss the various Epidemiological methods used in conducting a study / Research.

II. Write notes on:

(8 x 5 = 40)

1. National Immunization Schedule.
2. What are the differences between Case control and Cohort studies?
3. Draw the disaster response cycle.
4. Discuss about the Prevention and Control of CKD in a population.
5. Discuss about the parts of a Hemodialysis machine with a neat diagram.
6. Discuss the types of Malnutrition with examples.
7. Write a note on the effects of smoking in health.
8. Obesity and its complications.

III. Short answers on:

(10 x 3 = 30)

1. Name two methods used to screen for Diabetes.
2. Define Hypertension and normal cutoff for healthy adult individual.
3. What is Primordial prevention? Give an example.
4. Dietary advice for patients with Diabetes.
5. Name four disease conditions associated with Junk foods.
6. Define Reverse Osmosis.
7. Oral Rehydration Therapy.
8. Incidence and Prevalence of disease.
9. Triage in Disaster Management.
10. Multipara monitors in ICU.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 1332

B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR (Regulations 2014-2015 & 2018-2019 onwards)
PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS
Q.P. Code: 801332

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain in detail the classification, Hazards and Segregation of Biomedical Wastes.
2. Discuss different phases in the Disaster Management Cycle.
3. What is CRRT? Explain the different types of Modalities in CRRT.

II. Write notes on:

(8 x 5 = 40)

1. Tools of Measurement in Epidemiology.
2. Types of Hospital Acquired Infections with examples.
3. Vascular access for Hemodialysis.
4. Causes, symptoms and treatment of Hypertension.
5. Obesity and its complications.
6. Methods used for Health Education of a large group.
7. Factors causing Tuberculosis.
8. Prevention of Diabetes.

III. Short answers on:

(10 x 3 = 30)

1. Define Rate.
2. Reverse osmosis.
3. Define Mid-Year population.
4. Measurement of BMI.
5. What is Crude death rate?
6. Barriers of Communication.
7. Complication of IJV HD Catheter Insertion.
8. HD machine disinfection.
9. Alarms in Dialysis machine.
10. Cyler in Automated Peritoneal Dialysis (APD).

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1332

B.Sc. DIALYSIS TECHNOLOGY
SECOND YEAR (Regulations 2014-2015 & 2018-2019 onwards)
PAPER II – COMMUNITY MEDICINE AND BASIC MEDICAL ELECTRONICS
Q.P. Code: 801332

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Define Epidemiology and write in detail about Aims, Methods and Uses of Epidemiology.
2. Explain Basic parts of equipments used in Hemodialysis with diagram.
3. Describe the risk factors, prevention and control of Chronic Kidney disease.

II. Write notes on:

(8 x 5 = 40)

1. Advantages of Health Education.
2. HD catheter and AV fistula care.
3. Disposal of Biomedical Waste.
4. Routes of disease transmission for communicable disease with examples.
5. Health screening.
6. Types of Disaster.
7. Techniques of Counseling.
8. Barrier of Communication.

III. Short answers on:

(10 x 3 = 30)

1. List the Biological disasters.
2. Incubation period for Chicken Pox.
3. Blood borne infections.
4. Swine flu.
5. Predialysis assessment.
6. Epidemiology.
7. Total Fertility Rate.
8. Standard precautions in Dialysis Unit.
9. Indications for CRRT.
10. Define Oliguria and Anuria.
