

Question Paper

Exam Date & Time: 15-Jan-2021 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. RRT & DT DEGREE EXAMINATION - JANUARY 2021
SUBJECT: BDT 201 - DIALYSIS TECHNOLOGY - I
(2016 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain anatomy of peritoneum. List its functions and its importance in peritoneal dialysis. (20)
- 2) Describe hemodialysis. Define the principals involved in hemodialysis and describe factors affecting solute clearance in hemodialysis. (20)
- 3) List the indications and contraindications for peritoneal dialysis. (10)
- 4) Name any three hemodialysis machine make. Briefly discuss two types of circuits involved in the hemodialysis machine. (10)
- 5A) Write a note on tonicity of the solution. (5)
- 5B) What is semipermeable membrane? How it works in dialysis? (5)
- 5C) Which are the two performance characteristics used to choose a good dialyzer explain. (5)
- 5D) Write a note on CAPD. (5)
- 5E) Compare and contrast normal kidney functions with dialysis. (5)
- 5F) List the hemodialysis types. (5)
- 6A) Define Kuf. (2)
- 6B) What is omentum? (2)
- 6C) Expand CRRT. (2)
- 6D) List the peritoneal dialysis apparatus. (2)
- 6E) How osmosis is different from diffusion? (2)

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Question Paper

Exam Date & Time: 18-Jan-2021 (02:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.O.T./ B.Sc. P.F.T./ BPT/ B.Sc. M.R.T./B.Sc. RADIOTHERAPY TECHNOLOGY/ B.Sc. C.V.T./B.Sc.
R.T./B.Sc. M.I.T./B.Sc. RRT&DT/B.Sc. EMT/B.Sc. AOTT DEGREE EXAMINATION - JANUARY 2021
SUBJECT: PATH 201 - PATHOLOGY
(2016/2016 RV/2019 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1A) Define leukaemia. Classify acute leukaemia. Describe the clinical features of acute leukaemia. (6)
(2+2+2 = 6 marks)
- 1B) Describe the blood picture and chromosomal abnormality of chronic myeloid leukaemia. (4)
- 2A) Compare the two major types of diabetes mellitus. (5)
- 2B) Define shock. Explain the pathogenesis of septic shock. (5)
(2+3 = 5 marks)
- 3A) Explain the vascular and cellular changes in acute inflammation. (5)
- 3B) Describe the etiology, modes of infection and clinical features of viral hepatitis. (5)
- 3C) Explain the process of fracture healing with factors influencing the healing. (5)
- 3D) Describe the types and morphology of tuberculosis. (5)

4. Write briefly on:

- 4A) Predisposing factors of atherosclerosis. (2)
- 4B) Cerebrovascular diseases. (2)
- 4C) Klinefelter's syndrome. (2)
- 4D) Carcinogenesis with suitable examples. (2)
- 4E) Clinical features of renal failure. (2)

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Question Paper

Exam Date & Time: 20-Jan-2021 (02:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.O.T./ B.Sc. P.F.T./BPT/ B.Sc. C.V.T./B.Sc. R.T./ B.Sc. M.I.T./B.Sc. RRT&DT/B.Sc. EMT/B.Sc. AOTT
DEGREE EXAMINATION -
JANUARY 2021
SUBJECT: MICR 201 - MICROBIOLOGY
(2016/2019 SCHEME)

Answer all the questions.
Draw diagrams wherever necessary.

Marks: 50

Duration: 120 mins.

- 1) Define and classify hypersensitivity reactions. Write in detail about type I hypersensitivity reaction. (10)
(1+2+7 = 10 marks)
- 2) Describe in detail the pathogenesis and prophylaxis of poliomyelitis. (10)
(5+5 = 10 marks)

3. Write short notes on:

- 3A) Bacterial flagella (5)
- 3B) Laboratory diagnosis of enteric fever. (5)
- 3C) Autoclave (5)
- 3D) ELISA (5)

4. Write short notes on:

- 4A) Define plasmids. Mention two properties of plasmids. (2)
- 4B) Two contributions of Robert Koch. (2)
- 4C) Two staining methods for *Mycobacterium tuberculosis*. (2)
- 4D) Draw a neat labelled diagram of trophozoite and cyst forms of *Entamoeba histolytica*. (2)
- 4E) Classify fungi according to morphology with one example each. (2)

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