

Question Paper

Exam Date & Time: 10-Dec-2018 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. (RRT & DT) DEGREE EXAMINATION - DECEMBER 2018

**SUBJECT: BDT 201 - DIALYSIS TECHNOLOGY I
(2016 SCHEME)**

Monday, December 10, 2018 (14.00 - 17.00)

Answer ALL questions.

Marks: 100

Duration: 180 mins.

- 1A) What are the components of hemodialysis apparatus? Discuss types of artificial kidney under different classifications and describe hollow fiber dialyzer design with a labelled diagram. (20)
- 1B) Define ultrafiltration. Discuss the factors affecting ultrafiltration in peritoneal dialysis. (20)
- 2A) Discuss APD. (10)
- 2B) List the advantages and disadvantages of peritoneal dialysis. (10)
- 3A) List any two functions of the hemodialysis machine and list the blood circuit alarms. (5)
- 3B) Write a note on omentum. (5)
- 3C) Write a note on semipermeable membrane. (5)
- 3D) Define diffusion. List the factors affecting diffusion. (5)
- 3E) Compare hemodialysis and peritoneal dialysis. (5)
- 3F) List the different hemodialysis machine modes for hemodialysis pre setup. (5)
- 4A) Define biocompatibility. (2)
- 4B) What is counter current flow? (2)
- 4C) Define osmosis. (2)
- 4D) List the steps of peritoneal dialysis procedure. (2)
- 4E) What is isotonic solution? Give an example. (2)

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Question Paper

Exam Date & Time: 06-Dec-2018 (02:00 PM - 04:00 PM)



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**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
DEGREE EXAMINATION - DECEMBER 2018
SUBJECT : MICR 201 - MICROBIOLOGY
(2016 SCHEME)
Thursday, December 06, 2018 (14.00 - 16.00)**

Answer ALL questions:

Marks: 50

Duration: 120 mins.

- 1) With a labelled diagram explain the cell wall of gram positive and gram negative bacteria. (10)
(5+5 = 10 marks)
- 2) Explain the etio-pathogenesis and laboratory diagnosis of cholera. (10)
(1+4+5 = 10 marks)
- 3) **Write short notes on:**
 - 3A) Laboratory diagnosis of HIV infection (5)
 - 3B) Bacterial growth curve (5)
 - 3C) Pathogenesis of poliomyelitis (5)
 - 3D) Laboratory diagnosis of viral infections (5)
- 4) **Answer the following questions:**
 - 4A) Indirect immunofluorescence test (2)
 - 4B) Clinical features of urinary tract infections (2)
 - 4C) Types of vaccines with examples (2)
 - 4D) Classification of PUO (2)
 - 4E) Morphology of Entamoeba histolytica (2)

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THIRD SEMESTER B.O.T./ B.Sc. P.F.T./ BPT/ B.Sc. M.R.T./B.Sc. C.V.T./B.Sc. R.T./ B.Sc. M.I.T./B.Sc.
RRT&DT DEGREE EXAMINATION - DECEMBER 2018
SUBJECT : PATH 201 - PATHOLOGY
(2016 SCHEME)
Monday, December 03, 2018 (14.00 - 16.00)

Answer ALL questions:

Marks: 50

Duration: 120 mins.

- 1A) Define necrosis. List any three types of necrosis with examples. (5)
(2+3 = 5 marks)
- 1B) Define granuloma and illustrate it with a suitable diagram. Enumerate the causes of granulomatous inflammation. (5)
(3+2 = 5 marks)
- 2A) Describe the predisposing factors and complications of atherosclerosis. (5)
- 2B) Describe the aetiology and clinical features of rheumatic heart disease. (5)
- 3A) Differentiate between healing by primary and secondary intention with suitable examples. (5)
- 3B) Define embolism. Enlist the types of embolism. Write a note on the clinicopathological consequences of pulmonary thromboembolism. (5)
(1+3+1 = 5 marks)
- 3C) i) Write a short notes on: Emphysema (5)
- 3C) ii) Write a short notes on: Jaundice (5)
- 4A) Mention the confirmatory tests for iron deficiency anaemia and thalassaemia. (2)
- 4B) List four features of a malignant tumour. (2)
- 4C) List four complications of diabetes mellitus. (2)
- 4D) List four features of nephrotic syndrome. (2)
- 4E) List four causes of thrombocytopenia. (2)

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