

Question Paper

Exam Date & Time: 16-Mar-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 - MARCH 2021
SUBJECT: PATH 201 - PATHOLOGY
(2016/2016 RV/2019 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Define anaemia. Describe the clinical features and laboratory diagnosis of nutritional anaemias. (10)
(2+8 = 10 marks)
- 2A) Define and classify fracture. Describe the process of fracture healing. (5)
(2+3 = 5 marks)
- 2B) Compare rheumatoid arthritis and osteoarthritis. (5)
- 3A) Describe the features of malignancy and routes of tumour spread. (5)
- 3B) List the types of shock and describe the pathogenesis of any one. (5)
- 3C) List the predisposing factors and complications of atherosclerosis. (5)
- 3D) Compare nephrotic syndrome and nephritic syndrome with suitable examples. (5)
- 4A) List the various types of emphysema. (2)
- 4B) Define cirrhosis of liver. List two causes. (2)
- 4C) List the cardinal features of acute inflammation. (2)
- 4D) List four examples of X-linked diseases. (2)
- 4E) List the various types of necrosis with suitable examples. (2)

-----End-----

Question Paper

Exam Date & Time: 18-Mar-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 - MARCH 2021
SUBJECT: MICR 201 - MICROBIOLOGY
(2016/2019 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) With a labelled diagram explain the cell wall of gram positive and gram negative bacteria. (10)
(5+5 = 10 marks)
- 2) Explain the pathogenesis and laboratory diagnosis of staphylococcal skin infections. (10)
(5+5 = 10 marks)

3. Write short notes on:

- 3A) Primary and secondary humoral immune response. (5)
- 3B) Autoclave. (5)
- 3C) Investigation of classical PUO. (5)
- 3D) Laboratory diagnosis of hepatitis B virus infection. (5)

4. Answer the following:

- 4A) Morphological classification of fungi. (2)
- 4B) Write two predisposing factors of urinary tract infections. (2)
- 4C) Immuno-prophylaxis of poliomyelitis. (2)
- 4D) Functions of bacterial capsule. (2)
- 4E) Write the principle and one use of direct immunofluorescence test. (2)

-----End-----

Question Paper

Exam Date & Time: 22-Mar-2021 (02:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - MARCH 2021
SUBJECT: BRES 203 - PEDIATRIC RESPIRATORY CARE
(2016 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Explain the normal capnographic waveform. Enlist the five abnormal capnographic waveform with a neat labelled diagram. (10)
(5+5 =10 marks)
- 2) Explain the three stages of ARDS. Add a note on the management of pediatric ARDS. (10)
(5+5 = 10 marks)
- 3A) Write a short note on the transition from fetal to neonatal circulation. (5)
- 3B) Explain in detail the mechanism of action of short acting β_2 agonists. (5)
- 3C) Write a note on small volume nebulizers. (5)
- 3D) Write a note on Epiglottitis. (5)
- 4A) Enlist the variable oxygen delivery devices. (2)
- 4B) Write two indications for Paediatric pulmonary function test. (2)
- 4C) Enlist two indications for Inhaled nitric oxide therapy. (2)
- 4D) Enlist the components of DOWNS scoring. (2)
- 4E) Enlist two difference between exudative and transudative fluid. (2)

-----End-----

Question Paper

Exam Date & Time: 24-Mar-2021 (02:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - MARCH 2021
SUBJECT: BRES 205 - PULMONARY DISEASES
(2016 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

Long Note:

1. A 40 year old male patient presented to casualty with a history of chronic cough with sputum production for consecutive 3 months for a period of 2 years. Patient also complains of severe dyspnea and has use of accessory muscles. On examination of chest, barrel chest is evident. Based on your interpretation of the interpretation of the information above, Answer the following questions.

- 1A) What could be the possible diagnosis? (2)
1B) Describe the screening and diagnostic tests used to support your diagnosis. (4)
1C) Outline the management of the disease. (4)

- 2) Describe a detailed management of near drowning. (10)

3. Short Notes:

- 3A) List the Berlin's criteria for clinical diagnosis of ARDS. (5)
3B) Discuss the pathophysiology of atelectasis. (5)
3C) Describe "stepwise approach" to Asthma treatment. (5)
3D) Explain the diagnostic tests used to confirm pulmonary embolism. (5)

4. Very Short Notes:

- 4A) Classify pneumonia based on the aetiology. (2)
4B) List the radiological features of pleural effusion. (2)
4C) Define bronchiolitis (2)
4D) What causes cystic fibrosis? Name two airway related symptoms of cystic fibrosis. (2)
4E) What is the difference between flail chest and rib fracture? (2)

-----End-----

Question Paper

Exam Date & Time: 26-Mar-2021 (02:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION - MARCH 2021
SUBJECT: BRES 201 - PULMONARY DIAGNOSTICS
(2016 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- | | | |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1) | Explain in detail about body plethysmography | (10) |
| 2) | Short note on paediatric Pulmonary function test | (10) |
| 3A) | Depict the following using flow-volume and volume-time graphs
i) Air leak
ii) Cough
iii) Glottis closure
iv) Inadequate Inhalation
v) Obstruction | (5) |
| 3B) | Explain the views of chest X-ray | (5) |
| 3C) | Draw and explain normal central venous pressure waveform | (5) |
| 3D) | Define respiratory alkalosis. Enlist the causes for Respiratory Alkalosis. | (5) |
| 4A) | Define resting energy expenditure. | (2) |
| 4B) | Explain the features of rotated chest X-ray film | (2) |
| 4C) | What is high resolution CT scanning. | (2) |
| 4D) | List four indications for Pulmonary artery catheterization. | (2) |
| 4E) | Define residual volume. | (2) |

-----End-----