

Question Paper

Exam Date & Time: 29-Aug-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER BPT/ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc. RRT&DT / BOPT / B.O.T. DEGREE EXAMINATION - AUG/SEPT 2019

SUBJECT : PHARMACOLOGY (PHAR 202)
(2016 SCHEME)

Thursday, August 29, 2019 (14.00 - 16.00)

Answer ALL questions.

Marks: 50

Duration: 120 mins.

1) Define the following terms with an example:

- | | | |
|-----|------------------------|-----|
| 1A) | Generic name | (2) |
| 1B) | Local anaesthetics | (2) |
| 1C) | First pass metabolism | (2) |
| 1D) | Bactericidal drug | (2) |
| 1E) | Competitive antagonism | (2) |

Answer all the questions.

- | | | |
|-----|--|-----|
| 2A) | Enumerate two anticholinesterases. List two uses and two adverse effects of them. | (3) |
| 2B) | List two parenteral routes of drug administration and mention two advantages and two disadvantages of any one of them. | (3) |
| 2C) | Explain the basis for combining levodopa with carbidopa. | (2) |
| 2D) | Mention two classes of anti-hypertensive drugs with an example for each. | (2) |
| 3A) | Enumerate three classes of drugs used in peptic ulcer with an example for each and explain the mechanism of action of any one of them. | (5) |
| 3B) | List two classes of anti HIV drugs with an example for each. Explain the mechanism of action of acyclovir and mention its two adverse effects. | (5) |
| 3C) | List two NSAIDs and explain their anti-inflammatory action. List two uses and two contraindications of any one of them. | (5) |
| 3D) | Enumerate two corticosteroids and explain their immunosuppressant action. List two uses and two adverse effects of corticosteroids. | (5) |

4) List two examples and two uses of the following groups.

- | | | |
|-----|-------------------|-----|
| 4A) | Aminoglycosides | (2) |
| 4B) | Anticoagulants | (2) |
| 4C) | Antifungal agents | (2) |

- 4D) Antiemetics (2)
- 4E) Antihistaminics (2)

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Question Paper

Exam Date & Time: 30-Aug-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER B.Sc. C.V.T./ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc. RRT&DT / BOPT / B.O.T. / B.Sc. H.I.M. / B.Sc. E.S.S.
DEGREE EXAMINATION - AUG/SEPT 2019
SUBJECT : GENERAL PSYCHOLOGY/ PSYCHOLOGY (PSYC 202)
(2016/2016 RV SCHEME)
Friday, August 30, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- | | | |
|-----|---|------|
| 1) | Explain the types and any two theories of Emotion. | (10) |
| 2) | Define Perception. Describe the laws of perception with examples. | (10) |
| 3A) | Observation method | (5) |
| 3B) | Long Term Memory | (5) |
| 3C) | Any five Defense mechanisms | (5) |
| 3D) | Moral development | (5) |
| 4A) | Reinforcement | (2) |
| 4B) | Flynn effect | (2) |
| 4C) | Availability heuristic | (2) |
| 4D) | Projective test | (2) |
| 4E) | Primary motives | (2) |

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Question Paper

Exam Date & Time: 31-Aug-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER B.Sc. R.T. DEGREE EXAMINATION - AUG/SEPT 2019

SUBJECT : BIOSTATISTICS (STAT 402)

(2016 SCHEME)

Saturday, August 31, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

1) Briefly explain the following:

- 1A) Ratio scale (2)
- 1B) Relative Frequency (2)
- 1C) General Fertility Rate (GFR) (2)
- 1D) Gross Reproduction Rate (GRR) (2)
- 1E) Crude Death Rate (CDR) (2)

Answer all the questions.

- 2) Explain the characteristics of statistical data. (5)
- 3) Explain different types of variables with examples. (5)

4) Erythrocyte Sedimentation Rate (ESR) readings (in mm) of 12 tuberculosis patients are given below.

12 8 11 9 8 14 8 12 8 9 11 10

Calculate the values of:

- 4A) Sample mean (2)
- 4B) Sample standard deviation (5)
- 4C) Coefficient of variation (2)
- 4D) Range (1)

5) A random sample of 140 children had a mean urinary lead concentration of 2.15 $\mu\text{mol}/24\text{hr}$, with standard deviation 0.85. Construct reference range which includes 95% of the observations. (5)

6) Enumerate any four differences between probability (random) sampling and non-probability sampling techniques. (4)

7) What is positive correlation? Explain with an example. (3)

8) Briefly explain the steps involved in a research process. (8)

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Question Paper

Exam Date & Time: 03-Sep-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - AUG/SEPT 2019
SUBJECT: BRES 204 - RESPIRATORY CARE PHARMACOLOGY
(2016 SCHEME)
Tuesday, September 03, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Long answer question. Draw diagrams as necessary.

- 1) Explain in detail the physical properties of mucus and write any four mucolytic agents. (10)
(6+4 = 10 marks)
- 2) Enumerate the routes of Opioid drug administration? (10)
(5+5 = 10 marks)

3. Short notes:

- 3A) Classify corticosteroid drugs and give one example for each. (5)
- 3B) Nicotine replacement therapies. (5)
- 3C) Indications and adverse effects of Adrenaline. (5)
- 3D) A dosage schedule of a surfactant calls for 4ml per kilogram of body weight. If a premature infant weighs 1200g, how many milliliters surfactant is needed? What is the normal pool of surfactant? (5)
(4+1 = 5 marks)

4. Very short notes:

- 4A) Define pinocytosis. (2)
- 4B) What is an orphan drug? (2)
- 4C) What is synergism and give an example. (2)
- 4D) Any four adverse effects of anticoagulants. (2)
- 4E) What is the predominant sympathetic receptor type found on airway smooth muscle? (2)

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