

Exam Date & Time: 14-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SIXTH SEMESTER B.TECH END SEMESTER EXAMINATIONS, MAY 2022
BASIC CLINICAL SCIENCES II [BME 3251]

Marks: 50

Duration: 180 mins.

A

Answer all the questions.

Instructions to Candidates:

Missing data may be suitably assumed

- 1) Name few hypoxia prevention safety devices in the anesthesia workstation. (3)
 - A)
 - B) Describe oxygen concentrators in brief. (3)
 - C) Name the patterns of stimulation with peripheral nerve stimulator. Describe in brief TOF ratio. (4)
- 2) Describe in brief the components of invasive blood pressure monitoring system. (3)
 - A)
 - B) What is OCTA? Mention two differences between FFA and OCTA? (3)
 - C) What is LASER? Enumerate three laser tissue interactions with an example each for its clinical application. (4)
- 3) What is tonometry? Enumerate the different types of tonometer with one example for each? (3)
 - A)
 - B) List different types of contact lenses with one use of each. (3)
 - C) Explain the instrumentation of pure tone audiometry. (4)
- 4) Differentiate hearing aid and cochlear implant. (3)

- A)
- B) Explain the role of biomedical engineers in the field of speech and hearing. (5)
- C) Enumerate stages of sleep. (2)
- 5) Enumerate cranial nerves and the functions they sub-serve. (3)
- A)
- B) With neat labelled diagram describe neuromuscular junction. (3)
- C) Write a note on RNS. (4)

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