

FINAL EXAM
DECEMBER 2016

NATIONAL BOARD OF EXAMINATIONS

PHYSICAL MEDICINE AND REHABILITATION

PAPER – IV

PMR/D/16/35/IV

Time : 3 hours
Max. Marks : 100**Important instructions:**

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1. a) What are environmental control devices? 4+6
b) What type of devices would be helpful in a patient having tetraplegia at C4 level?
2. a) What is functional electrical stimulation? 4+6
b) How is it helpful in a patient having paraplegia at D7 level? Give the principles of its usage.
3. a) What are architectural barriers? 2+(4+4)
b) What are the common barriers for a patient on a wheel chair and how would you address them?
4. a) What types of interface devices are available for propulsion of a motorized wheel chair in a patient having C5 level tetraplegia? 5+5
b) What are the prescription criteria for each type of such a device?
5. a) What are the principles of evaluation of permanent physical impairment in a patient having post-polio residual paralysis of the lower limb? 6+(2+2)
b) Write each component involved in such evaluation along with combining formula. How many doctors need to certify it?
6. a) What is body weight supported gait training? 4+4+2
b) How is it helpful in training a person with hemiplegia?
c) What does the recent literature say about its efficacy?
7. a) How does the quadrilateral socket differ from the Ischial containment socket? 5+5
b) Compare the two sockets for their advantages and disadvantages.
8. a) What are the recent advances in the prosthetic foot ankle mechanisms for a trans-tibial amputation for athletic activities? 6+4
b) How are they helpful in increasing the efficiency of the athlete?
9. a) What are the principles of interventional pain management? 5+5
b) What are the modalities used in this?
10. a) What is sacral anterior root stimulator device? 5+5
b) How is it useful in patients with spinal cord injury?
