



01	☐ A	☐ B	☐ C	☐ D	☐ E
02	☐ A	☐ B	☐ C	☐ D	☒ E
03	☐ A	☐ B	☐ C	☒ D	☐ E
04	☐ A	☒ B	☐ C	☐ D	☐ E
05	☐ A	☐ B	☐ C	☐ D	☒ E
06	☐ A	☒ B	☐ C	☐ D	☐ E
07	☐ A	☐ B	☐ C	☐ D	☒ E
08	☐ A	☐ B	☒ C	☐ D	☐ E
09	☒ A	☐ B	☐ C	☐ D	☐ E
10	☒ A	☐ B	☐ C	☐ D	☐ E
11	☐ A	☒ B	☐ C	☐ D	☐ E
12	☐ A	☒ B	☐ C	☐ D	☐ E
13	☐ A	☐ B	☐ C	☐ D	☒ E

14	☒ A	☐ B	☐ C	☐ D	☐ E
15	☐ A	☐ B	☐ C	☐ D	☒ E
16	☒ A	☐ B	☐ C	☐ D	☐ E
17	☐ A	☐ B	☐ C	☐ D	☒ E
18	☐ A	☒ B	☐ C	☐ D	☐ E
19	☒ A	☐ B	☐ C	☐ D	☐ E
20	☐ A	☐ B	☒ C	☐ D	☐ E
21	☒ A	☐ B	☐ C	☐ D	☐ E
22	☐ A	☐ B	☐ C	☒ D	☐ E
23	☒ A	☐ B	☐ C	☐ D	☐ E
24	☒ A	☐ B	☐ C	☐ D	☐ E
25	☐ A	☐ B	☐ C	☐ D	☒ E
26	☐ A	☐ B	☐ C	☐ D	☒ E

27	☐ A	☐ B	☒ C	☐ D	☐ E
28	☐ A	☐ B	☒ C	☐ D	☐ E
29	☐ A	☐ B	☒ C	☐ D	☐ E
30	☐ A	☐ B	☐ C	☒ D	☐ E
31	☐ A	☐ B	☒ C	☐ D	☐ E
32	☐ A	☐ B	☒ C	☐ D	☐ E
33	☐ A	☒ B	☐ C	☐ D	☐ E
34	☐ A	☐ B	☐ C	☒ D	☐ E
35	☒ A	☐ B	☐ C	☐ D	☐ E
36	☐ A	☒ B	☐ C	☐ D	☐ E
37	☐ A	☐ B	☒ C	☐ D	☐ E
38	☐ A	☐ B	☐ C	☒ D	☐ E
39	☐ A	☒ B	☐ C	☐ D	☐ E

PRACTICE QUESTIONS

National Health Regulatory Authority (NHRA)

ORTHO

Orthopedic Surgery

Uploaded by Community A

EDITION

Original Demo

QUESTIONS

6

ISSUED

October 14, 2026

Before you begin

What this is

6 practice questions for National Health Regulatory Authority (NHRA) ORTHO , each with its answer key and an explanation. Answer a question before you read its key - the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, ORTHO
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

Licence

Free Mometrix practice demo. The complete question bank is available through a paid account.

QUESTION 1

SINGLE CHOICE

A 24-year-old man has an isolated closed tibial shaft fracture treated with a long-leg cast. Six hours after injury, he reports pain out of proportion, with pain on passive toe extension. The orthopaedic surgery resident increases opioid analgesia. Which is the most appropriate next step?

- ☐ A Continue current analgesia and observe for another 6 hours
- ☒ B Split or bivalve the cast and re-assess; if no improvement, measure compartment pressures
- ☐ C Apply a regional nerve block before any further assessment
- ☐ D Proceed directly to open reduction and internal fixation

ANSWER B

WHY Acute compartment syndrome is a clinical diagnosis, but pain out of proportion and pain on passive stretch are classic early signs. The first immediate maneuver is to release any external constrictive dressing or bivalve the cast. If symptoms persist, compartment pressure measurement confirms the diagnosis and emergent fasciotomy is indicated. Increasing opioids alone masks the warning sign and risks a missed compartment syndrome, while a regional block abolishes the very clinical sign used to monitor for it.

QUESTION 2

SINGLE CHOICE

A 58-year-old active woman sustains a displaced subcapital femoral neck fracture (Garden IV). Which surgical intervention provides the most favorable long-term outcome with respect to preserving femoral head vascularity and reducing the risk of avascular necrosis in this physiologically young adult?

- ☐ A Total hip arthroplasty
- ☐ B Hemiarthroplasty (bipolar)
- ☒ C Internal fixation with multiple cannulated screws
- ☐ D Non-operative management with protected weight-bearing

ANSWER C

WHY In a young, active patient (under ~60 years) with a displaced femoral neck fracture, anatomic reduction and internal fixation (typically with three cannulated screws in an inverted triangle configuration) is preferred to preserve the native femoral head. Arthroplasty (total or hemi) is reserved for older or low-demand patients because internal fixation preserves the head vasculature when reduction is achieved promptly. Non-operative management yields unacceptably high rates of nonunion, malunion, and avascular necrosis in a displaced fracture.

QUESTION 3

SINGLE CHOICE

A 47-year-old woman presents with a 48-hour history of low back pain, progressive lower-limb weakness, saddle anesthesia, and urinary retention with overflow incontinence. Straight-leg raise is positive bilaterally and anal tone is reduced. What is the most appropriate immediate action?

- ☐ A Arrange outpatient MRI within 2 weeks and review in clinic
- ☐ B Prescribe oral dexamethasone and physiotherapy
- ☒ C **Urgent MRI of the lumbosacral spine and neurosurgical/orthopaedic spinal surgical consultation for urgent decompression**
- ☐ D Discharge with analgesia and catheter care, with no imaging

ANSWER C

WHY The clinical picture is classic cauda equina syndrome (CES): saddle anesthesia, bladder dysfunction, lower-limb weakness, and reduced anal tone. CES is a surgical emergency; emergent MRI confirms the cause (typically large central disc herniation) and urgent surgical decompression within 24-48 hours of onset is associated with improved neurological recovery. Steroids are not standard of care for compressive CES, and outpatient imaging or discharge risks irreversible bladder and motor deficits.

QUESTION 4

SINGLE CHOICE

A 40-year-old man presents with a one-week history of low back pain and right-sided radiculopathy. On examination, straight leg raise is positive at 30° on the right, ankle dorsiflexion is weak (4/5), and sensation is reduced over the dorsum of the foot and first web space. Which nerve root is most likely affected?

- ☐ A L3
- ☐ B L4
- ☒ C L5
- ☐ D S1

ANSWER C

WHY Weakness of ankle dorsiflexion and sensory loss over the dorsum of the foot/first web space are characteristic of L5 radiculopathy. S1 would produce weakness of plantarflexion and sensory loss over the lateral foot; L4 affects ankle dorsiflexion less specifically and produces medial leg sensory loss; L3 affects knee extension and anterior thigh sensation.

QUESTION 5

SINGLE CHOICE

A 22-year-old man sustains a high-velocity open tibial fracture. Intraoperatively, the wound is 12 cm long with extensive soft tissue loss, periosteal stripping, and a severely contaminated farmyard injury. According to the Gustilo-Anderson classification, what is the correct grade?

- ☐ A Type I
- ☐ B Type II
- ☐ C Type IIIA
- ☒ D Type IIIC

ANSWER D

WHY A high-energy open fracture with extensive soft tissue loss, periosteal stripping, and severe contamination qualifies as Gustilo-Anderson Type IIIB, and when associated with an arterial injury requiring repair it becomes Type IIIC. The remaining options describe progressively less severe injuries and do not match the described findings.

QUESTION 6

SINGLE CHOICE

A 14-year-old boy presents with a 4-month history of deep, progressive pain in the distal femur that is worse at night and partially relieved by NSAIDs. Radiographs show a mixed lytic and sclerotic lesion in the metaphysis with periosteal elevation and a sunburst pattern. What is the most likely diagnosis?

- ☐ A Osteomyelitis
- ☐ B Ewing sarcoma
- ☒ C Osteosarcoma
- ☐ D Giant cell tumour

ANSWER C

WHY Osteosarcoma classically presents in adolescents with progressive deep bone pain (often worse at night), a metaphyseal lesion around the knee, and characteristic radiographic features including periosteal elevation (Codman triangle) and a sunburst periosteal reaction. Ewing sarcoma typically presents in the diaphysis with an 'onion-skin' periosteal reaction.