

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 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

Consortium of Multiple Sclerosis Centers (CMSC)

# MSHA

Multiple Sclerosis Healthcare Associate Certification Exam

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

# Before you begin

---

## What this is

9 practice questions for Consortium of Multiple Sclerosis Centers (CMSC) MSHA , 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, MSHA
- the question number
- the email address on your order

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

**QUESTION 1**

SINGLE CHOICE

Which pathologic process is the primary driver of irreversible disability accumulation in multiple sclerosis (MS)?

- ☐ A Acute demyelination of central nervous system white matter
- ☒ B Neuroaxonal degeneration within the central nervous system
- ☐ C Remyelination failure limited to the spinal cord
- ☐ D Peripheral nerve demyelination

**ANSWER B**

**WHY** While acute demyelination produces the relapses typical of MS, neuroaxonal degeneration is the principal substrate of irreversible, progressive disability. Remyelination failure contributes to chronic deficits but is not the principal driver, and peripheral demyelination is not a feature of MS.

**QUESTION 2**

SINGLE CHOICE

A patient with relapsing-remitting MS (RRMS) experiences a gradual worsening of walking speed over 18 months without acute relapses and without new lesions on follow-up MRI. Which MS disease course best describes this presentation?

- ☐ A Relapsing-remitting MS (RRMS)
- ☐ B Primary progressive MS (PPMS)
- ☒ C Secondary progressive MS (SPMS)
- ☐ D Clinically isolated syndrome (CIS)

**ANSWER C**

**WHY** Transition from RRMS to SPMS is defined by progressive neurological worsening independent of relapses, typically over at least 6–12 months. PPMS is progressive from onset without a prior relapsing phase, and CIS refers to a first demyelinating event that does not yet meet dissemination-in-time criteria.

**QUESTION 3**

SINGLE CHOICE

According to the 2017 McDonald Criteria, which CSF finding can substitute for dissemination in time when establishing a diagnosis of multiple sclerosis in a patient with a clinically isolated syndrome?

- ☐ A Elevated CSF total protein
- ☐ B CSF pleocytosis with neutrophils
- ☒ C CSF-specific oligoclonal bands
- ☐ D Low CSF glucose

**ANSWER C**

**WHY** The 2017 McDonald Criteria allow the presence of CSF-specific oligoclonal bands to substitute for dissemination in time in a patient who already meets dissemination in space on clinical or MRI grounds. Elevated protein, neutrophilic pleocytosis, and low glucose are not specific MS criteria.

**QUESTION 4**

SINGLE CHOICE

Which disease-modifying therapy works by binding the  $\alpha 4$ -integrin subunit and reducing lymphocyte trafficking across the blood-brain barrier?

- ☐ A Fingolimod
- ☐ B Dimethyl fumarate
- ☒ C Natalizumab
- ☐ D Glatiramer acetate

**ANSWER C**

**WHY** Natalizumab is a monoclonal antibody directed against the  $\alpha 4$ -integrin subunit that blocks lymphocyte entry into the CNS. Fingolimod is a sphingosine-1-phosphate receptor modulator, dimethyl fumarate activates the Nrf2 pathway, and glatiramer acetate is a synthetic myelin basic protein analogue.

**QUESTION 5**

SINGLE CHOICE

Which non-pharmacologic intervention has the strongest evidence for improving gait speed and balance in patients with MS-related gait dysfunction?

- ☐ A Bed rest to conserve energy
- ☒ B Supervised, task-based exercise and physical therapy
- ☐ C Long-term opioid therapy
- ☐ D Strict sodium restriction

**ANSWER B**

**WHY** Supervised, task-based exercise and physical therapy are supported by evidence to improve gait speed, balance, and mobility in people with MS. Bed rest worsens deconditioning, opioids carry significant risk without strong evidence for MS gait dysfunction, and sodium restriction is not a primary intervention for gait.

**QUESTION 6**

SINGLE CHOICE

A patient with an acute MS relapse has failed to improve after 5 days of high-dose intravenous methylprednisolone. What is the most appropriate next step in management?

- ☐ A Repeat an additional 10-day course of intravenous methylprednisolone at a higher dose
- ☒ B Initiate plasma exchange (plasmapheresis)
- ☐ C Switch immediately to long-term disease-modifying therapy and discharge
- ☐ D Begin oral baclofen

**ANSWER B**

**WHY** For severe relapses unresponsive to high-dose corticosteroids, therapeutic plasma exchange (plasmapheresis) is the recommended next-line therapy. Simply repeating or escalating corticosteroids beyond standard high-dose regimens is not supported, and baclofen addresses spasticity, not acute relapse activity.

**QUESTION 7**

SINGLE CHOICE

When discussing disease-modifying therapy options with a patient newly diagnosed with MS, which communication approach best supports shared decision-making?

- ☐ A Recommend a single therapy without discussion of alternatives to avoid overwhelming the patient
- ☒ B Present the risks and benefits of each option, elicit the patient's values and preferences, and arrive at a decision together
- ☐ C Defer the decision to the neurologist exclusively
- ☐ D Have the patient select from a printed list without further discussion

**ANSWER B**

**WHY** Shared decision-making requires presenting evidence-based options with their risks and benefits and integrating the patient's values, preferences, and life context. Limiting options, deferring exclusively to the clinician, or offering an undiscussed list undermines patient autonomy and informed consent.

**QUESTION 8**

SINGLE CHOICE

Which laboratory test should be performed at baseline and regularly during natalizumab therapy to assess risk for progressive multifocal leukoencephalopathy (PML)?

- ☐ A Serum glucose
- ☒ B Anti-JC virus antibody testing
- ☐ C Serum creatinine
- ☐ D Prothrombin time

**ANSWER B**

**WHY** Anti-JC virus (JCV) antibody testing identifies prior exposure to JCV and stratifies PML risk in patients on natalizumab. Glucose, creatinine, and prothrombin time are not used to stratify PML risk.

**QUESTION 9**

SINGLE CHOICE

A patient with relapsing-remitting multiple sclerosis has no new neurologic symptoms for 5 years but reports slowly progressive weakness that has continued since a prior incomplete recovery from a relapse. Which disease-course description is most accurate?

- ☐ A Clinically isolated syndrome
- ☐ B Relapsing-remitting multiple sclerosis
- ☒ C Secondary progressive multiple sclerosis
- ☐ D Primary progressive multiple sclerosis

**ANSWER C**

**WHY** The patient initially had relapsing disease and later developed sustained progression independent of acute relapses, which characterizes secondary progressive multiple sclerosis.