

Physiology of Performance

Drama & Theatre · Practice Test · 20 Questions

1. Which anatomical structure is primarily responsible for the 'vocal fry' effect often cautioned against in vocal pedagogy due to potential laryngeal fatigue?

- A) The arytenoid cartilages
- B) The epiglottis
- C) The hyoid bone
- D) The thyroid notch

2. During sustained theatrical 'projection' without amplification, which muscle group performs the primary work of forced exhalation to increase subglottal pressure?

- A) External intercostals
- B) Internal intercostals
- C) Pectoralis minor
- D) Sternocleidomastoid

3. What is the clinical term for the localized swelling on vocal folds, often resulting from chronic mechanical trauma during rigorous stage acting?

- A) Laryngeal polyp
- B) Vocal nodule
- C) Contact granuloma
- D) Laryngocele

4. In dance-heavy theatre, which ligament is most frequently strained during rapid, repetitive lateral movements common in choreography?

- A) Anterior talofibular ligament
- B) Iliofemoral ligament
- C) Ligamentum flavum
- D) Posterior cruciate ligament

5. What is the physiological role of the 'Valsalva manoeuvre' in the context of stage combat or lifting heavy props?

- A) Increasing oxygen saturation in the blood
- B) Stabilizing the core via intra-abdominal pressure
- C) Relaxing the trapezius muscles
- D) Lowering the heart rate to prevent stage fright

6. Chronic exposure to theatrical 'fog juice' (glycol-based) can result in which specific respiratory condition if ventilation is poor?

- A) Emphysema
- B) Pulmonary fibrosis
- C) Occupational asthma
- D) Chronic bronchitis

7. Which cranial nerve is most directly responsible for the motor innervation of the intrinsic muscles of the larynx used in speech production?

- A) Trigeminal nerve
- B) Glossopharyngeal nerve
- C) Vagus nerve
- D) Hypoglossal nerve

8. When performing 'stage falls', which anatomical structure is specifically designed to absorb shock and protect the underlying nerve clusters in the elbow?

- A) Olecranon bursa
- B) Medial epicondyle
- C) Ulnar nerve
- D) Radial head

9. What is the primary mechanism by which 'Alexander Technique' aims to improve stage performance through bodily awareness?

- A) Muscle hypertrophy
- B) Reflexive inhibition of habitual tension
- C) Cardiovascular conditioning
- D) Increased bone density

10. In theater lighting, the 'Stroboscopic Effect' can trigger what specific health condition in photosensitive individuals?

- A) Vertigo
- B) Myoclonic jerks
- C) Tinnitus
- D) Vasovagal syncope

11. The 'subglottic pressure' required for operatic singing is significantly higher than conversational speech; what is the approximate range in cm H₂O for professional singers?

- A) 2-5 cm H₂O
- B) 10-30 cm H₂O
- C) 50-70 cm H₂O
- D) 80-100 cm H₂O

12. Stage actors often suffer from 'vocal attrition'; which layer of the vocal fold is most susceptible to permanent scarring from excessive vibration?

- A) Epithelium
- B) Superficial lamina propria
- C) Vocalis muscle
- D) Basement membrane zone

13. Which joint is most frequently impacted by the 'en pointe' position in ballet, leading to potential sesamoiditis?

- A) Metatarsophalangeal joint
- B) Talocrural joint
- C) Subtalar joint
- D) Interphalangeal joint

14. To maintain posture during long theatrical monologues, which spinal segment provides the primary support against gravity?

- A) Cervical curvature
- B) Thoracic kyphosis
- C) Lumbar lordosis
- D) Sacral fusion

15. What is the medical term for the physical manifestation of 'stage fright' characterized by the involuntary constriction of the throat?

- A) Globus pharyngeus
- B) Dysphonia plica ventricularis
- C) Laryngospasm
- D) Vocal fold paresis

16. Which muscle is the primary 'workhorse' for inspiration, essential for actors needing quick, 'silent' breaths between lines?

- A) Diaphragm
- B) Rectus abdominis
- C) Latissimus dorsi
- D) Serratus anterior

17. The use of heavy stage makeup can lead to 'acne cosmetica'; which ingredient is the most common culprit in theatrical greasepaint?

- A) Isopropyl myristate
- B) Zinc oxide
- C) Titanium dioxide
- D) Kaolin clay

18. What physiological phenomenon occurs when an actor experiences a 'blood rush' or syncope during rapid standing after long periods of kneeling on stage?

- A) Orthostatic hypotension
- B) Hypertension
- C) Vasodilation
- D) Peripheral neuropathy

19. In stage fencing, which muscle group is primarily engaged to prevent hyper-extension of the knee during a 'lunge'?

- A) Quadriceps femoris
- B) Hamstrings
- C) Gastrocnemius
- D) Tibialis anterior

20. Which specific bone is most susceptible to fracture during repetitive high-impact stage landings if proper biomechanics are ignored?

- A) Calcaneus
- B) Talus
- C) Cuboid
- D) Navicular