Name:	Subject: Biology	Class: 12 th	Time: 80 minutes	Total Marks:	40
Chapter No.16	MJDexpert.com			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

Q#1 Encircle the Correct Option (10 x 1 = 10)

- 1. What is the membrane that surrounds each muscle called?
- A) Estrogen B) Endosome C) Both A & B D) Sarcolemma
- 2. What is the main component of thick muscle fibers?
- A) Myosin B) Actin C) Lignin D) None
- 3. What is the primary source of energy for muscle contraction?
- A) Lactic Acid B) ATP C) Both A & B D) None
- 4. Cardiac muscles are classified as?
- A) Involuntary B) Voluntary C) Both A & B D) None
- 5. The shoulder joint is an example of a?
- A) Hinge Joint B) Synovial Joint C) Cartilaginous Joint D) Ball and Socket Joint
- 6. How many parts does sclerenchyma have?
- A) 2 B) 4 C) 3 D) 5
- 7. Collenchyma cells typically lack?
- A) Secondary Wall B) Primary Wall C) Both A & B D) None of these
- 8. How many types of skeletons are found in animals?
- A) 4 B) 5 C) 3 D) 2
- 9. A hinge joint permits movement in?
- A) Only One Direction B) Two Directions C) Any Direction D) None of these
- 10. The hip joint is an example of a?
- A) Ball and Socket Joint B) Hinge Joint C) Synovial Joint D) Cartilaginous Joint

Q #2 Short Questions (2 x 10 = 20)

- 1. What is the turgor process?
- 2. Explain the roles of collenchyma and sclerenchyma in plants.
- 3. What does ecdysis or moulting refer to?
- 4. List the components of the axial skeleton.
- 5. What are ligaments?
- 6. How many ribs do not attach directly to the sternum?
- 7. Compare and contrast bone and cartilage.
- 8. Describe three events in the sliding filament model of muscle contraction.
- 9. What are three functions of the skeletal system?
- 10. What is a fibrous capsule?

Q #3 Long Questions $(2 \times 5 = 10)$

- 1. What are the drawbacks of an exoskeleton?
- 2. Describe the human skeleton in detail.