Yakeen NEET 2.0 2026

Zoology By Samapti Sinha Ma'am Structural Organization in Animals

DPP: 6

- Q1 _____ fibres, shorten in response to the stimulation and then they lengthen themselves and return to their initial uncontracted state in a coordinated manner.
 - (A) Muscle
 - (B) Nerve
 - (C) Collagen
 - (D) None of the above
- **Q2** Which of the following correctly represents the number of spiracular openings on the lateral side of a cockroach's body?
 - (A) 8 pairs
- (B) 9 pairs
- (C) 10 pairs
- (D) 11 pairs
- Q3 Which of the following statements(s) is/are correct about muscle tissue?
 - (A) Each muscle is made of many long, cylindrical fibres arranged in parallel arrays
 - (B) Muscle fibres contract (shorten) in response to stimulation, the relax (lengthen) and return to their uncontracted state in a coordinated fashion
 - (C) Muscles play an active role in all movements of the body
 - (D) All of the above
- Q4 Which one of the following is not the property of skeletal muscle?
 - (A) Extensibility
- (B) Elasticity
- (C) Excitability
- (D) Reactivity
- Q5 fibres, shorten in response to the stimulation and then they lengthen themselves

and return to their initial uncontracted state in a coordinated manner.

- (A) Muscle
- (B) Nerve
- (C) Collagen
- (D) None of these
- **Q6** The common feature exhibited by both muscle fibre and nerve fibre is:
 - (A) contractility.
- (B) excitability.
- (C) extensibility.
- (D) elasticity.
- Q7 Choose the **correct** option w.r.t. the common character of the given tissues (A and B).



- (A) Number of nuclei in a cell.
- (B) Functioning of tissue.
- (C) Presence of communication junction.
- (D) Cylindrical and striated in appearance.
- **Q8** Which of the following is correct pairing of a body part and the kind of muscle tissue that moves it?
 - (A) Iris Involuntary smooth muscle
 - (B) Heart wall Involuntary unstriated muscle
 - (C) Biceps of upper arm Smooth muscle fibres
 - (D) Abdominal wall Voluntary smooth muscle

- **Q9** Which of the following statement is incorrect?
 - (A) Muscle cell contract in response to stimulus
 - (B) Muscle action maintain the position of various part of body
 - (C) Muscles are of three type skeletal, smooth and cardiac
 - (D) Biceps muscles in leg is an example of skeletal muscle
- Q10 Identify the tissue shown in the diagram and Match with its characteristics and its location.



- (A) Skeletal muscle, shows striations and closely attached with the bones of the limbs
- (B) Smooth muscles, show branching, found in the walls of the heart
- (C) Cardiac muscles, unbranched muscles, found in the walls of the heart
- (D) Striated muscles, tapering at both-ends, attached with the bones of the ribs
- Q11 Each muscle is made of many long, cylindrical fibres arranged in parallel arrays. These fibres are composed of numerous fine fibrils called:
 - (A) Fascicles
 - (B) Myofibrils
 - (C) Myofilaments
 - (D) Both (B) and (C)
- Q12 Skeletal muscle is composed of the repeating structure offibers
 - (A) Albumin and calcium
 - (B) Insulin and albumin

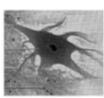
- (C) Humulin and casein
- (D) Actin and myosin
- Q13 Which are the characteristics of skeletal muscles?
 - (A) Cylindrical, striped and branched
 - (B) Cylindrical, striped and uninucleate
 - (C) Spindle, unbranched and uninucleate
 - (D) Cylindrical, syncytial and unbranched
- Q14 Which of the following is not true for muscle fibres associated with biceps?
 - (A) Multinucleated in appearance
 - (B) Striated in nature
 - (C) Extensively branched in appearance
 - (D) Voluntary in nature
- Q15 The presence of light and dark bands is a feature of
 - (A) Cardiac muscle fibre only
 - (B) skeletal muscle fibre only
 - (C) smooth muscle fibre only
 - (D) Both cardiac and skeletal muscle fibre
- Q16 See the figures given below and select the mismatch w.r.t. identification or corresponding feature listed.

(A)



Voluntary, striated fibres exhibiting structural syncytium

(B)



Cell body is rich in Nissl's granules

(C)



Fibres with gap junctions between adjacent



Intercellular material arranged in concentric lamellae and cells are found in lacunae.

- Q17 Smooth muscles are
 - (A) Involuntary, fusiform, non-striated
 - (B) Voluntary, multinucleate, cylindrical
 - (C) Involuntary, cylindrical, striated
 - (D) Voluntary, spindle-shaped, uninucleate
- Q18 Contractile tissue characterised by presence of intercalated discs is found in:
 - (A) biceps.
 - (B) heart.
 - (C) intercostal muscles.

- (D) diaphragm.
- **Q19** Cardiac muscle fibres usually contract
 - (A) Slowly and get fatigued
 - (B) Involuntarily and do not get fatigued
 - (C) Voluntarily and do not get Fatigued
 - (D) Quickly and get fatigued
- Q20 Cardiac muscle cells are.....
 - (A) Uninucleate and voluntary
 - (B) Uninucleate and involunatary
 - (C) Multinucleate and voluntary
 - (D) Multinucleate and involuntary
- **Q21** Intercalated discs are present in:
 - (A) Cardiac muscles.
 - (B) Striped muscles.
 - (C) Unstriated muscles.
 - (D) Ligaments.
- **Q22** Which of the following is the characteristic feature of cardiac muscles?
 - (A) Cylindrical, branched and uninucleate
 - (B) Long, pointed and uninucleate
 - (C) Long, cylindrical and unbranched
 - (D) Cylindrical, unbranched and multinucleate

Answer	Key

Q1	(A)	Q12	(D)
Q2	(C)	Q13	(D)
Q3	(D)	Q14	(C)
Q4	(D)	Q15	(D)
Q5	(A)	Q16	(D)
Q6	(B)	Q17	(A)
Q7	(D)	Q18	(B)
Q8	(A)	Q19	(B)
Q9	(D)	Q20	(B)
Q10	(A)	Q21	(A)
Q11	(D)	Q22	(A)

