

GENERAL SCIENCE- MOST IMPORTANT QUESTIONS / SAMPLE PAPER - 2

1. Motion of a body with constant speed in a circular path is called:

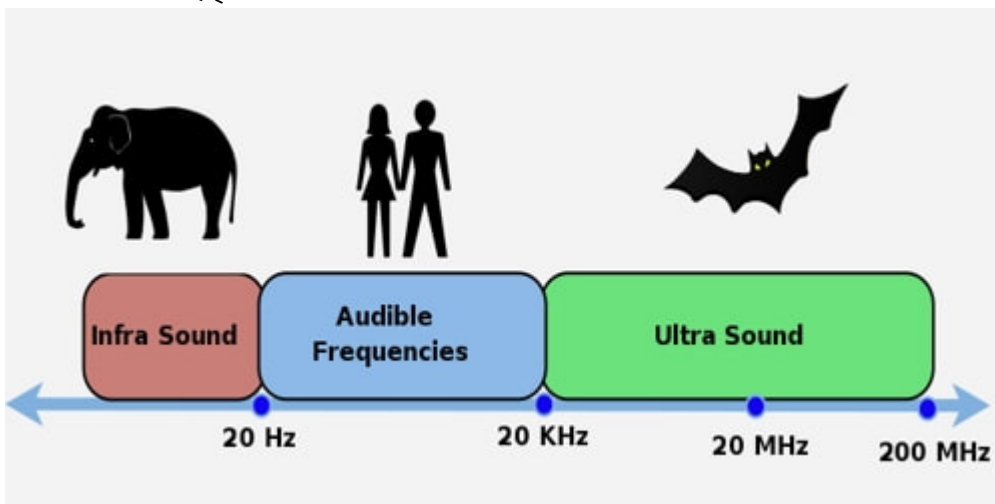
वृत्ताकार पथ में स्थिर गति से किसी पिंड की गति कहलाती है:

- a. Uniform circular motion/ एकसमान वृत्तीय गति
- b. Non-uniform circular motion/ असमान वृत्तीय गति
- c. Circulatory motion/ परिसंचरण गति
- d. Oscillatory motion/ दोलन गति

2. An ultrasonic sound wave has a frequency higher than:

एक अल्ट्रासोनिक ध्वनि तरंग की आवृत्ति इससे अधिक होती है:

- a. 20 Hz/20 हर्ट्ज
- b. 20000 Hz/20000 हर्ट्ज
- c. 200 Hz/200 हर्ट्ज
- d. 2000 Hz/2000 हर्ट्ज



Explanation :The Ultrasonic sound has a frequency higher than 20000Hz. Ultrasound is sound waves with frequencies higher than the audible frequency.

3. Which of the following can undergo sublimation?

निम्नलिखित में से कौन ऊर्ध्वपातक से गुजर सकता है ?

- a. Ammonium chloride/ अमोनियम क्लोराइड
- b. Ammonium chlorate/ अमोनियम क्लोरेट
- c. Ammonium sulphate/ अमोनियम सल्फेट
- d. Ammonium phosphate/ अमोनियम फॉस्फेट

Explanation Ammonium chloride can undergo sublimation, when it is heated, the substance undergoes changes from solid to gas.

4. The forces between two bodies are always:

दो निकायों के बीच बल हमेशा होते हैं:

- a. Unequal and in the opposite direction/ असमान और विपरीत दिशा में
- b. Equal and in the opposite direction/ बराबर और विपरीत दिशा में
- c. Equal and in the same direction/ समान और एक ही दिशा में
- d. Isolated forces/ पृथक बल

5. Fibers are absent in:

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फाइबर अनुपस्थित हैं:

- a. Liver/ यकृत
- b. Blood/रक्त
- c. Kidney/ गुर्दा
- d. Heart/हृदय

Explanation Blood is a connective tissue that has a fluid matrix, called plasma, and no fibers.

6. In negative acceleration, the velocity of a body

ऋणात्मक त्वरण में किसी पिंड का वेग.....

- a. Remains constant/ स्थिर रहता है
- b. Is zero/ शून्य है
- c. Decreases/ कम हो जाती है
- d. Increases/ बढ़ता है

7. The work done in moving a charge from one point to the other is 20 J. If the potential difference between the points is 10 V, the charge is:

किसी आवेश को एक बिंदु से दूसरे बिंदु तक ले जाने में किया गया कार्य 20 J है। यदि बिंदुओं के बीच संभावित अंतर 10 V है, तो आवेश है:

- a. 4.0 C
- b. 2.0 C
- c. 0.5 C
- d. 1.0 C

Calculation : Given that,

Work done (W) = 20J

Potential difference (V) = 10V

Since Work done (W) = Charge (q) x Potential difference (V)

=> Charge (q) = W/V

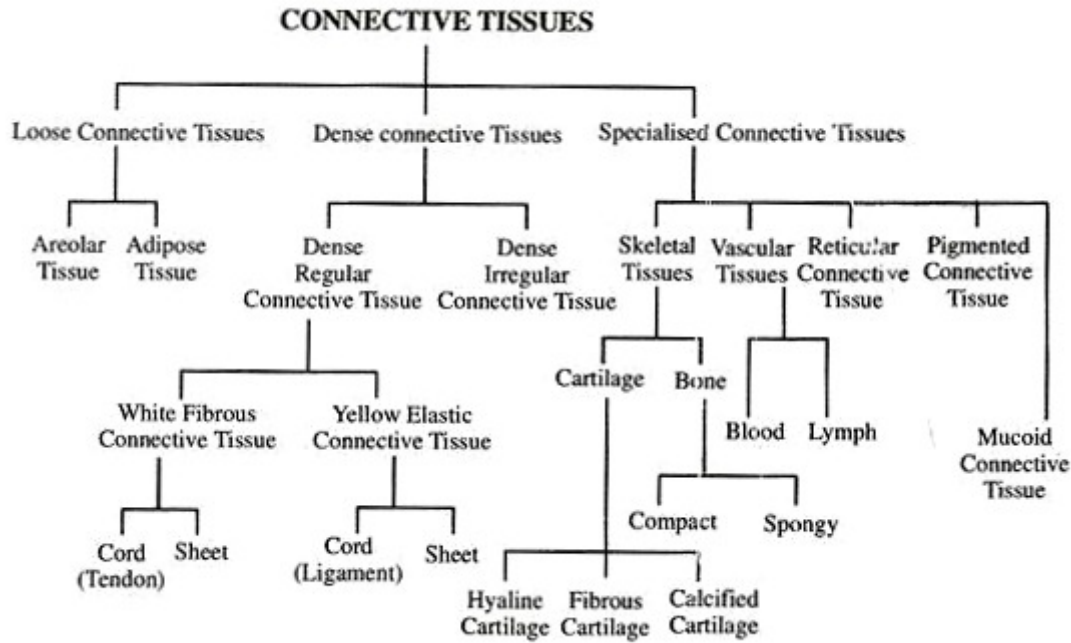
=> q = 20/10 = 2 Coulomb(C)

8. Which of the following is not a Connective Tissue?

निम्न में से कौन संयोजी ऊतक नहीं है?

- a. Cartilage tissue/ उपास्थि ऊतक
- b. Muscular Tissue/ पेशीय ऊतक
- c. Adipose Tissue/ वसा ऊतक
- d. Ligament/लिगामेंट

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9. Which element in the periodic table forms maximum number of compounds?

आवर्त सारणी में कौन सा तत्व अधिकतम संख्या में यौगिक बनाता है?

- H
- O
- S
- C

Explanation Carbon forms the maximum number of compounds in the periodic table. Since carbon has the property of tetra valency and catenation so they can form a maximum number of compounds.

10. Fats and oils become rancid because of:

वसा और तेल निम्न कारणों से खराब हो जाते हैं:

- Transpiration/ वाष्पोत्सर्जन
- Reduction/अपचयन
- Oxidation/ ऑक्सीकरण
- Corrosion/ जंग

Explanation Fats and oils that are in contact with moist air at room temperature eventually undergo oxidation and hydrolysis reactions that cause them to turn rancid, acquiring a characteristic disagreeable odor. One cause of the odor is the release of volatile fatty acids by hydrolysis of the ester bonds.

11. The oesophagus and lining of the mouth are also covered with

अन्नप्रणाली और मुंह के अस्तर को भी से ढका जाता है।

- Squamous epithelium/ पपड़ीदार उपकला
- Ciliated epithelium/ सिलिअटेड एपिथेलियम
- Columnar epithelium/ स्तंभकार उपकला
- Glandular epithelium/ ग्रंथियों उपकला

Explanation The oesophagus and lining of the mouth are also covered with Squamous epithelium. Ciliated epithelium is thin hair-like structures present on the respiratory tract and fallopian tubes which help in the motion of the particles out of the body.

12. Which tissue is responsible for transport of materials away from the root?

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जड़ से दूर पदार्थों के परिवहन के लिए कौन सा ऊतक जिम्मेदार है?

- a. Ground tissue/ जमीन ऊतक
- b. Cambium/ कैंबियम
- c. Phloem/ फ्लोएम
- d. Xylem/ जाइलम

13. If the mass of a body is 'm' on the surface of the earth, its mass on the surface of the moon will be :
यदि किसी पिंड का द्रव्यमान पृथ्वी की सतह पर 'm' है, तो चंद्रमा की सतह पर उसका द्रव्यमान होगा:

- a. $m/6$
- b. $m+6$
- c. m
- d. $6m$

Explanation If the mass of a body is M on the surface of the earth, the mass of the same body on the surface of the moon is. The mass of the body on the surface of the moon is M because it doesn't depend on the acceleration due to gravity and remains the same at all places .

14. Which organ of the body is affected by Leukoderma ?

ल्यूकोडर्मा से शरीर का कौन सा अंग प्रभावित होता है?

- a. Heart/हृदय
- b. Kidney/ गुर्दा
- c. Lungs/ फेफड़े
- d. Skin/ त्वचा

Explanation Vitiligo also called as 'leucoderma' is an autoimmune disorder wherein the immune system of the body attacks the healthy cells and, in turn, starts affecting the body. The condition is characterised by white patches on the skin that develops as a result of melanocytes within the skin.

15. A mixture of sand and salt can be separated by :

रेत और नमक के मिश्रण को अलग किया जा सकता है:

- a. Sublimation/ ऊर्ध्वपातक
- b. Sieving/ छलनी
- c. Dissolving salt in water and then filtration/ नमक को पानी में घोलना और फिर छानना
- d. Dissolving salt in water and then distillation/ पानी में नमक घोलना और फिर आसवन

16. The persistence of sound in an auditorium is due to :

एक सभागार में ध्वनि के बने रहने का कारण है :

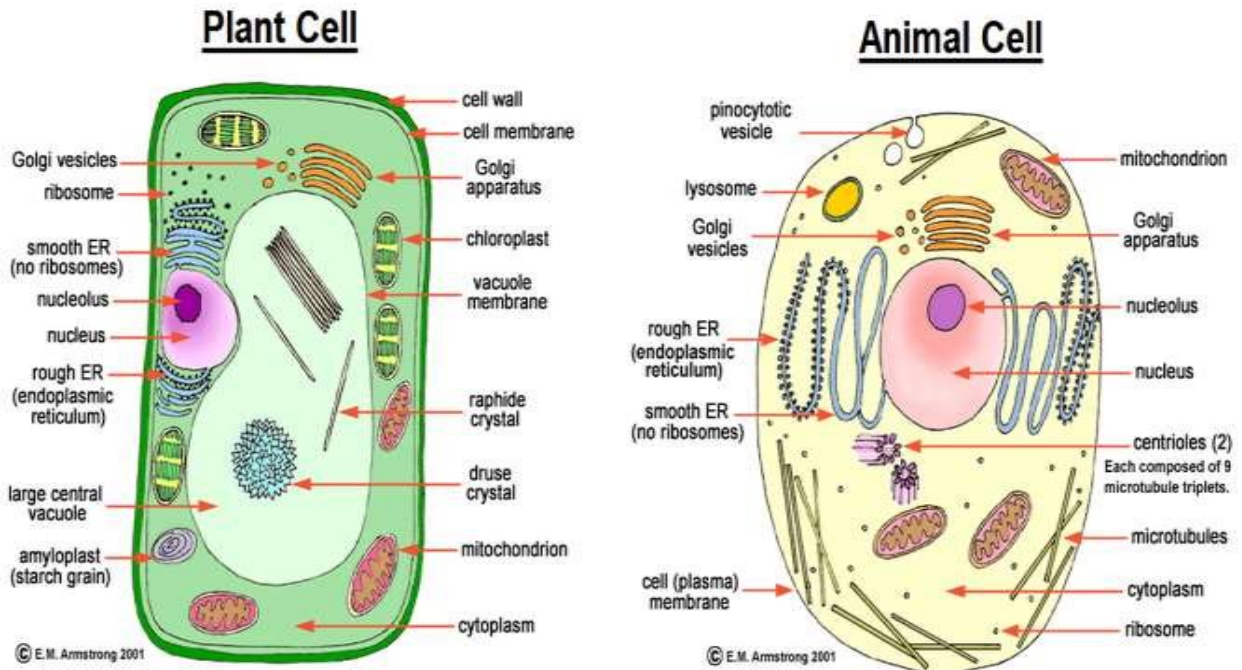
- a. Single reflection of sound/ ध्वनि का एकल प्रतिबिंब
- b. Repeated reflections of sound/ ध्वनि का बार-बार परावर्तन
- c. Repeated refraction of sound/ ध्वनि का बार-बार अपवर्तन
- d. Vibration of objects placed in the auditorium/ सभागार में रखी वस्तुओं का कंपन

Explanation The persistence of sound in an auditorium is due to reverberation. Reverberation is the process of persistence of sound due to repeated reflection.

17. Which among the following is NOT present in animal cell ?

निम्नलिखित में से कौन पशु कोशिका में मौजूद नहीं है?

- a. Mitochondria/ माइटोकॉन्ड्रिया
- b. Chloroplast/ क्लोरोप्लास्ट
- c. Nucleolus/ न्यूक्लियस
- d. Plasma membrane/ प्लाज्मा झिल्ली



Explanation Cell wall and chloroplast are not present in the animal cell. The cell wall in a plant cell is a very tough, flexible and sometimes fairly rigid layer that surrounds some types of cells. It surrounds the cell membrane and provides these cells with structural support and protection. In addition, the cell wall is acting as a filtering mechanism.

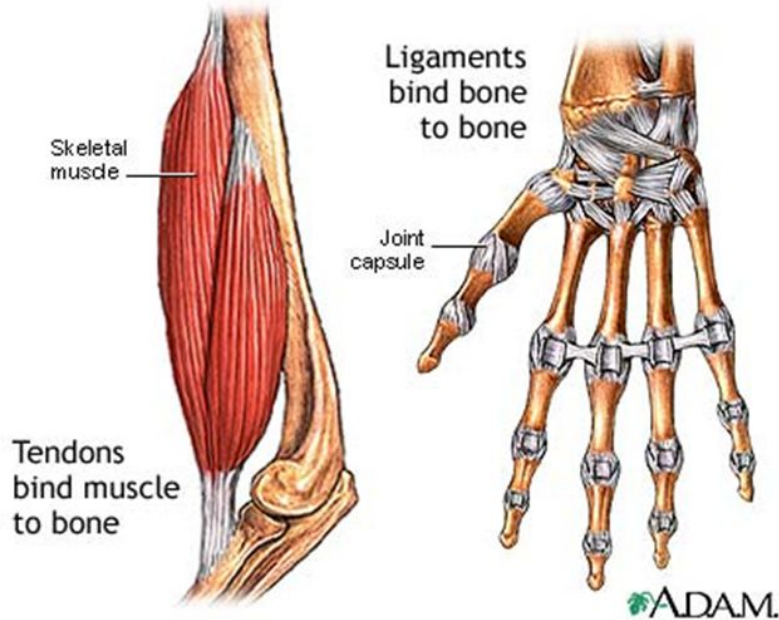
Chloroplasts are exclusively found in plants and photosynthetic unicellular organisms and, hence, animal cells lack chloroplast.

18. Tendon connects :

टेनडन जोड़ता है:

- Bone to bone/ हड्डी से हड्डी
- Muscles to bone/ मांसपेशियों से हड्डी
- Muscles to Muscles/ मांसपेशियों से मांसपेशियों
- Nerve to muscles/ मांसपेशियों को तंत्रिका

Tendon vs. Ligament



19. Group of cells having a common origin and performing similar functions are called :
एक समान उत्पत्ति और समान कार्य करने वाली कोशिकाओं के समूह को कहा जाता है:

- a. Tissues/ ऊतकों
- b. Organs/ अंग
- c. Organ systems/ अंग प्रणाली
- d. Cell aggregate/सेल समुच्चय

Explanation Organ is a collection of tissues combined in a structural unit to perform a common function. Organ system is a unit in which many organs work together to carry out one particular function. For example- cardiac cycle is carried out by heart, blood vessels and blood.

Cell aggregate is an aggregation of cells at a particular site in a particular situation, e.g. when blood vessels being ruptured then platelets become aggregated at that site.

A group of cells having a common origin and performing a similar function is called as tissue.

20. Which pair is NOT correctly matched ?

कौन सा जोड़ा सही सुमेलित नहीं है ?

- a. Pisciculture – Fish/पीसीकलचर - मछली
- b. Sericulture – Earthworms/सेरीकलचर - केंचुए
- c. Green Revolution – Agriculture/ हरित क्रांति - कृषि
- d. White Revolution – Milk/ श्वेत क्रांति - दूध

Explanation Sericulture is the process of cultivating silkworms and extracting silk from them and A vermiculture is the process of breeding earthworms.

21. Fluid part of Blood after removal of Corpuscles is called :

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कणिकाओं को हटाने के बाद रक्त के द्रव भाग को कहते हैं :

- a. Vaccine/ टीका
- b. Lymph/ लसीका
- c. Serum/ सीरम
- d. Plasma/ प्लाज्मा

Explanation Lymph is clear to whitish liquid in which white blood cells, especially lymphocytes are suspended. The serum is blood plasma without blood cells (like red blood cells, white blood cells, and platelets) and blood clotting factors like fibrinogen. Vaccine provides the individual with active acquired immunity. It contains weakened or killed microbes, its toxin or one of its surface proteins. Plasma is a pale yellow colored fluid that remains after red blood cells, white blood cells and platelets are removed from the blood.

22. CG is done to diagnose an ailment connected with?
सीजी किस रोग से संबंधित निदान के लिए किया जाता है?

- a. Kidney/ गुर्दा
- b. Heart/हृदय
- c. Brain/मस्तिष्क
- d. Blood/रक्त

23. Quinine is obtained from which of the following Plant?
कुइनाइन निम्नलिखित में से किस पौधे से प्राप्त होता है?

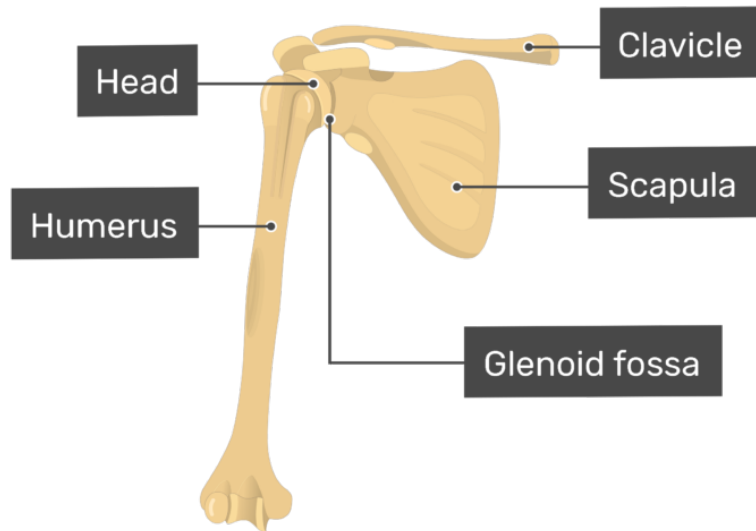
- a. Cinchona/सिनकोना
- b. Cocoa/ कोको
- c. Mulberry/मुलबेरी
- d. Eucalyptus/ युकलिप्टुस

Explanation Quinine, as a component of the bark of the cinchona (quina-quina) tree, was used to treat malaria from as early as the 1600s, when it was referred to as the "Jesuits' bark," "cardinal's bark," or "sacred bark." These names stem from its use in 1630 by Jesuit missionaries in South America, though a legend suggests.

24. Humerus bone is situated in?
ह्यूमरस हड्डी कहाँ स्थित होती है?

- a. Thigh/ जांघ
- b. Upper arm/ ऊपरी भुजाएं
- c. Knee/ घुटना
- d. Forearm/ भुजा

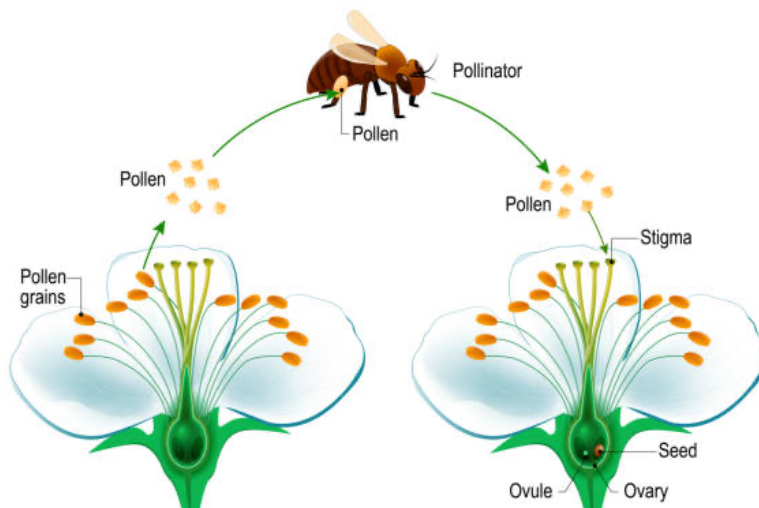
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Explanation The humerus is the bone in your upper arm. It's located between your elbow and your shoulder, and consists of several parts that allow it to move freely in different directions. Your humerus has important functions related to both movement and support.

25. Transfer of pollen grains from anther to the stigma of a flower is called
परागणों का परागकोष से पुष्प के वर्तिकाग्र पर स्थानांतरण को कहते हैं।

- a. Pollination/ परागन
- b. Regeneration/ पुनर्जनन
- c. Transpiration/ वाष्पोत्सर्जन
- d. Sexual reproduction/ यौन प्रजनन



Explanation The transfer of pollen grain from the anther to the stigma of a pistil is called pollination. It is a mechanism by which non-motile male and female gametes are brought together for the fertilization.