

PGT BIOLOGY

1. Who launched the 90-day campaign 'Azadi Se Antyodaya Tak'?

- (A) Amit Shah
- (B) Piyush Goyal
- (C) Kiren Rijju
- (D) Giriraj Singh

Correct Answer: (D)

2. Which country signed agreements on training staff and IT cooperation to deepen railway cooperation In Sep 2022?

- (A) Russia-India
- (B) Ukraine-Turkey
- (C) India-Bangladesh
- (D) America-India

Correct Answer: (C)

3. The “Donbas War” is currently being fought in

- (A) Serbia
- (B) Ukraine
- (C) Syria
- (D) Lebanon

Correct Answer: (B)

4. Pedagogy is the study of

- (A) education
- (B) learning process
- (C) teaching methods
- (D) guiding students

Correct Answer: (C)

5. Dyslexia is associated with

- (A) mental disorder
- (B) mathematical disorder
- (C) reading disorder
- (D) behavioural disorder

Correct Answer: (C)

6. Which government organizations will develop guidelines for the education of gifted children?

(A) NCERT and NCFCS

(B) NCERT and NCTE

(C) NCERT and NTA

(D) NCERT and SCERT

Correct Answer: (B)

7. In the spring season, cambium is very active and produces a large number of xylary elements having vessel with wider cavities. The wood formed during this season is called_____.

(A) Heart wood

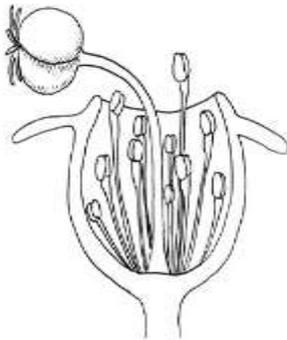
(B) Autumn wood

(C) Early wood

(D) Late wood

Correct Answer:(C)

8. Given inflorescence is a



(A) Cyathium

(B) Dichasial cyme

(C) Umbel

(D) Panicle

Correct Answer:(A)

9. Select the correct statement

- (a) From the region of elongation, some of the epidermal cells form root hairs
- (b) Pneumatophores are seen in Rhizophora
- (c) Adventitious roots are seen in Banyan tree
- (d) Maize and Sugarcane have prop roots

- (A) (a) & (b)
- (B) (b) & (c)
- (C) (c) & (d)
- (D) (a), (b) & (d)

Correct Answer:(B)

10. Read the sentences carefully and select the correct sentence regarding pollen grain

- i) Pollen grains contain a hard layer known as exine made up of cellulose and pectin
- ii) Pollen grain exine has prominent apertures called germ pores
- iii) The inner wall of the pollen grain is called the intine; It is a thin and continuous layer
- iv) Pollen consumption has been claimed to increase the performance of athletes

- (A) i), ii) & iii) are correct
- (B) ii), iii) & iv) are correct
- (C) i), iii) & iv) are correct
- (D) i), ii) & iv) are correct

Correct Answer:(B)

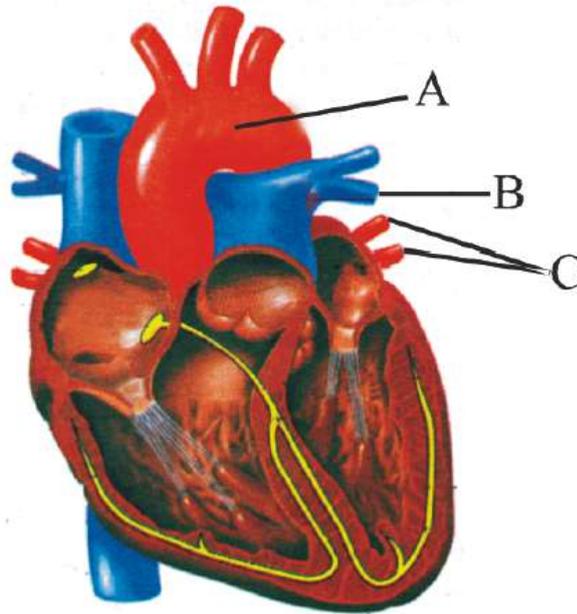
11. Match the column

Organism		Nature	
a	Aquatic insect	i	Ureotelic
b	Reptiles	ii	Ammonotelic
c	Mammals	iii	Uricotelic

- (A) a- iii), b-i), c-ii)
- (B) a-ii), b-iii), c-i)
- (C) a-i), b-ii), c-iii)
- (D) a-iii), b-ii), c-i)

Correct Answer:(C)

12.: Find correct labeling of following diagram:



Options:

- (A) A-Aorta, B-Pulmonary artery, C-Pulmonary veins
- (B) A-Aorta, B-Pulmonary vein, C-Left atrium
- (C) A-Venacava, B-Pulmonary veins, C-Left atrium
- (D) A-Pulmonary artery, B-Systemic arch, C-Pulmonary veins

Answer: (A)

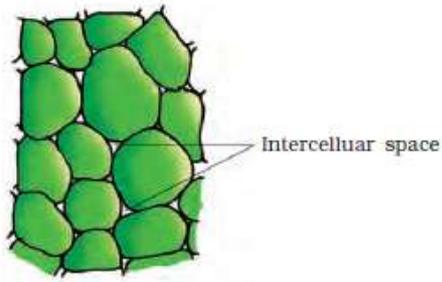
13. Observe the given floral diagram and choose the suitable floral formula from the following:



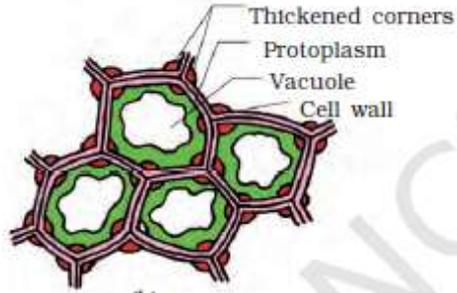
- (A) $\square \square \overset{\oplus}{\text{K}}_{2+2} \text{C}_4 \text{A}_{2+4} \text{G}_{(2)}$
- (B) $\square \square \overset{\oplus}{\text{K}}_2 \text{C}_4 \text{A}_{2+4} \text{G}_{(2)}$
- (C) $\square \square \overset{\oplus}{\text{K}}_{2+2} \text{C}_4 \text{A}_2 \text{G}_{(2)}$
- (D) $\square \square \overset{\oplus}{\text{K}}_{(5)} \text{C}_{(5)} \text{A}_5 \underline{\text{G}}_{(2)}$

Correct Answer:(D)

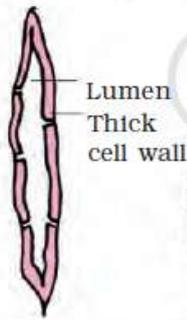
14. See the following figures and identify the types of simple tissue indicated by A, B, A and D



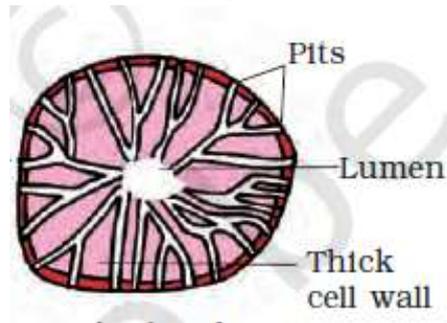
A



B



C



D

(A) A – Collenchyma, B – Parenchyma, C- Sclereid (Sclerenchyma), D – Fibre (Sclerenchyma)

(B) A – Parenchyma, B - Collenchyma –, C- Sclereid (Sclerenchyma), D – Fibre (Sclerenchyma)

(C) A – Collenchyma, B –Parenchyma, C- Fibre (Sclerenchyma) D – Sclereid (Sclerenchyma)

(D) A – Parenchyma, B – Collenchyma, C- Fibre (Sclerenchyma), D – Sclereid (Sclerenchyma)

Correct Answer:(D)

15. Match the following and choose the correct option.

A	Adipose tissue	i	Nose
B	Stratified epithelium	ii	Blood
C	Hyaline cartilage	iii	Skin
D	Fluid connective tissue	iv	Fat storage

- (A) A-i B-ii C- iii D-iv
(B) A-iv B-iii C- i D -ii
(C) A-iii B-i C - iv D -ii
(D) A- ii B-i C- iv D -iii

Correct Answer:(B)

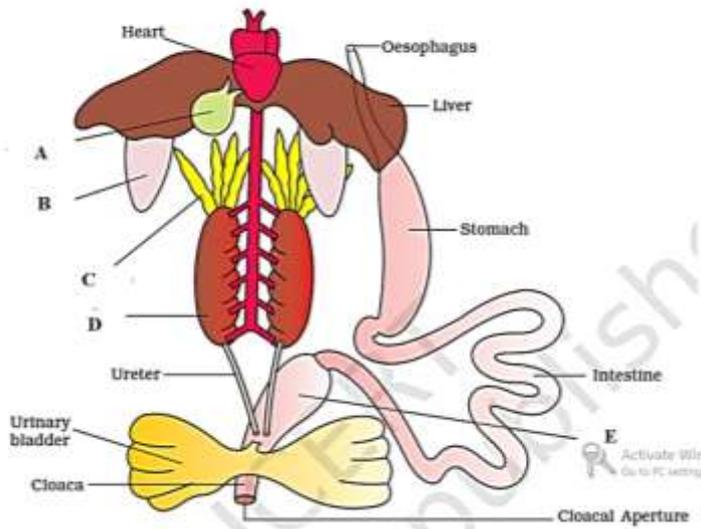
16. Read the sentences & identify the Plant Growth regulator.

- i) It was first isolated from human urine
- ii) They help to initiate rooting in stem cuttings
- iii) They help to prevent fruit and leaf drop at early stages
- iv) Promote the abscission of older mature leaves and fruits

- (A) Auxin
(B) Cytokinins
(C) Gibberellins
(D) Absciscic acid

Correct Answer:(A)

17. The given figure is related to diagrammatic representation of internal organs of frog. Identify A to E



- (A) A- Gall Bladder, B-Lung, C-Fat Bodies, D-Kidney, E-Rectum
 - (B) A- Gall Bladder, B-Lung, C-Testis, D-Kidney, E-Rectum
 - (C) A- Gall Bladder, B-Lung, C-Fat Bodies, D-Testis, E-Rectum
 - (D) A- Gall Bladder, B-Lung, C-Testis, D- Testis, E-Rectum
- Correct Answer:(A)

18. Fill in the blanks.

- (i) Bacterium __ (A) __ produce commercial product called lactic acid.
- (ii) A fungus __ (B) __ produce (cyclosporin A).
- (iii) __ (C) __ (*Monascus purpureus*) produce statins.
- (iv) A fungus (*Penicillium notatum*) produce __ (D) __.

(A) A-Lactobacillus
B-Trichoderma
C-Yeast (Fungus)
D-Penicillin

(B) A-Lactobacillus
B-Yeast
C-Trichoderma
D-Penicillin

(C) A-Lactobacillus
B-Penicillin
C-Yeast (Prokaryote)
D-Trichoderma

(D) A-Lactobacillus
B-Trichoderma
C-Yeast (Prokaryote)
D-Penicillin

Correct Answer:(A)

19. In which of the following both pairs have correct combination.

(A) Gaseous nutrient cycle - Carbon and Sulphur
. Sedimentary Nutrient cycle - Nitrogen and phosphorous

(B) Gaseous nutrient cycle - Nitrogen and Sulphur
. Sedimentary Nutrient cycle - Carbon and phosphorous

(C) Gaseous nutrient cycle - Sulphur and phosphorous
. Sedimentary Nutrient cycle - Carbon and Nitrogen

(D) Gaseous nutrient cycle - Carbon and Nitrogen
. Sedimentary Nutrient cycle - Sulphur and phosphorous

Correct Answer:(D)

Q 20) Case Study Based Question

Read the following and answer any four questions from given below:

Unlike animals, plants cannot runaway for their defence, therefore, they have evolved an astonishing variety of morphological and chemical defences against herbivores. Thorns are the most common morphological means of defence. Many plants produce and store chemicals that make the herbivore sick when they are eaten, inhibit feeding or digestion, disrupt its reproduction or even kill it. Some plants produce highly poisonous chemicals and that is why no cattle or goats browse on those plants.

A wide variety of chemical substances that we extract from plants on a commercial scale are produced by them actually as defence against grazers and browsers.

20. Why you never see cattle or goats browsing on weed Calotropis?

- (A) It produces highly poisonous tannins
- (B) It produces quinine which is bitter in taste.
- (C) It produces poisonous cardiac glycosides.
- (D) It bears prickles.

Correct Answer:(C)