

## జీవశాస్త్రము - పాఠ్యాంశముల విభజన

క్రమ సంఖ్య	సంగ్రహణాత్మక మూల్యాంకనం	పేపర్	పాఠ్యాంశాలు
1.	సంగ్రహణాత్మక మూల్యాంకనము-I (సెప్టెంబరు వరకు గల పాఠ్యాంశములు)	II	<ol style="list-style-type: none"> <li>1. పోషణ</li> <li>2. శ్వాసక్రియ</li> <li>3. ప్రసరణ</li> <li>4. విసర్జన</li> <li>5. నియంత్రణ - సమన్వయ వ్యవస్థ</li> </ol> <p>★ పర్యావరణ విద్య (1-15)</p>
2.	సంగ్రహణాత్మక మూల్యాంకనము-II (డిసెంబరు వరకు గల పాఠ్యాంశములు)	II	<ol style="list-style-type: none"> <li>1. పోషణ</li> <li>2. శ్వాసక్రియ</li> <li>3. ప్రసరణ</li> <li>4. విసర్జన</li> <li>5. నియంత్రణ - సమన్వయ వ్యవస్థ</li> <li>6. ప్రత్యుత్పత్తి</li> <li>7. జీవక్రియలలో సమన్వయం</li> <li>8. అనువంశికత</li> </ol> <p>★ పర్యావరణ విద్య (1-22)</p>
3.	సంగ్రహణాత్మక మూల్యాంకనము-III (పాఠ్యపుస్తకంలోని మొత్తం సిలబస్)	II	<ol style="list-style-type: none"> <li>1 నుండి 10 పాఠ్యాంశములు</li> </ol> <p>★ పర్యావరణ విద్య (1-22)</p>

**SUMMATIVE ASSESSMENT - III**  
**MODEL QUESTION PAPER**  
**X CLASS BIOLOGY - PAPER-II**

**Time : 2 hrs 45 min.**

**PART - A & B**

**Max. Marks : 40**

**WEIGHTAGE TABLES & BLUE PRINT**

**TABLE (1) WEIGHTAGE TO ACADEMIC STANDARDS**

S.No.	Academic Standards	Marks Alloted	Percentage
1	Conceptual Understanding	16	40
2	Asking Questions & making hypethesis	4	10
3	Experimenting & Field investigation	6	15
4	Information Skills	6	15
5	Communication through diagram	4	10
6.	Application to daily life concern to Biodiversity	4	10
	<b>TOTAL</b>	<b>40</b>	<b>100</b>

**TABLE (2) WEIGHTAGE TO TYPE OF QUESTIONS**

S.No.	Academic Standards	No. of Questions	Marks Alloted	Percentage
1	Very Short Answer	4	4	10
2	Short Answer	5	10	25
3	Essay/Long Answer	4	16	40
4	Multiple Choice	20	10	25
	<b>TOTAL</b>	<b>33</b>	<b>40</b>	<b>100</b>

**TABLE (3) BLUE PRINT (X CLASS PAPER-I)**

S.No.	Academic Standards	VSA	SA	LA	MCQ	TOTAL
1	Conceptual Understanding	3	2	1	18	24
2	Asking Questions & making hypethesis	-	21	-	-	21
3	Experimenting & Field investigation	-	1	1	-	2
4	Information Skills	-	0	1	1	2
5	Communication through diagram	-	-	1	1	2
6	Application to daily life concern to Biodiversity	1	1	-	-	2

**SUMMATIVE ASSESSMENT - III**  
**MODEL PAPER**  
**CLASS-X - BIOLOGY**  
**(ENGLISH MEDIUM)**

Time : 2 hrs 45 min.

**PART - A & B**

Max. Marks : 40

Time : 2 hrs 15 min.

**PART - A**

Max. Marks : 30

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- Instructions :** 1. 15 minutes allocated to read the question paper. 2.30 hours allocated to write answers.
2. Part-A must be answered in a separate answers sheet.
  3. Students can take Part-A (Question Paper) with them.
  4. Map and Part-B (Bit Paper) should tag to the answer sheet and give them to the invigilator.
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SECTION - I

**Note :** 1. Answer the following questions.

2. Each question carries ONE mark.

4 × 1 = 4 M

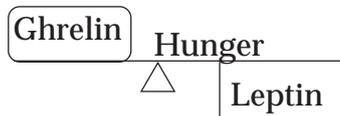
1. Complete the following table.

Parts in the brain.

S. No.	Concept	Part
1.	Fore brain	
2.	Mid brain	Optic lobes
3.	Hind brain	

Which part of the brain controls emotions ?

2. You are given Hibiscus flower. What procedure do you follow to collect pollengrains and to observe under microscope.
3. Observe the diagram.



Mention the duties of the above hormones.

4. "I have grown crops like a king. Now I am working as a watchman in a factory in an urban area. My wife who provided food for ten members, is now working as a domestic helper in houses".

**Answer the following questions based on the above information.**

1. Why do the farmers migrate to towns ?

SECTION - II

**Note : 1. Answer the following questions.**

**2. Each question carries TWO marks.**

**5 × 2 = 10 M**

5. Teacher told his student to wear  Red ribbon on December 1st.

- 1) What does it denote ?
- 2) Expand the word 'AIDS'

6. Observe the teeth arrangement in the diagram.



Type of teeth	Number of teeth	Shape

**7. Correct the Ravi's answers for the following questions.**

Questions	Ravi Answer		Your Answer	
	Yes	No	Yes	No
1) Quinine is extracted from Cinchona plants.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Pyrethroids are produced from Datura fruits and flowers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Caffeine is the nervous stimulator.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Morphine works as a pain killer.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Write about former based interventions to conserve soil, water, nutrients

9. Two kidneys are present in human beings as excretory organs. Ramulamma, at the age of 20 one Kidney was removed by operation. Now she has one son.

- a) How many kidneys are there in the son's body ?
- b) Support your answer.

SECTION - III

**Note : 1. Answer the following questions.**

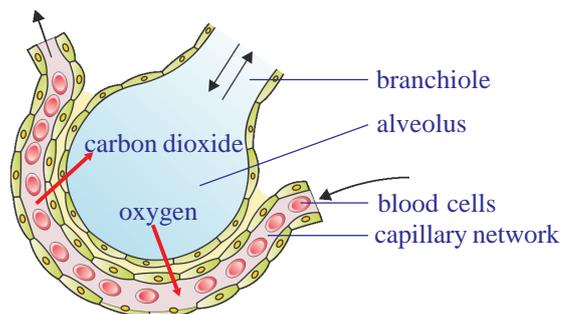
**2. Each question carries FOUR marks.**

**4 × 4 = 16 M**

10. Why flowering plants undergo double fertilization. Explain the process of the stages from pollination to formation of Endosperm.

(Or)

Analyse the process of cellular respiration and its results in humans with the help of the diagram given here.



11. Some hormones are classified in the following table.

Division I	Division II
Auxins	Adrenalin
Gibberellins	Testosterone
Ethylene	Growth hormone
Abscisic acid	Thyroid

- On what basis the above classification is done ?
- What are the duties of Adrenalin ?
- Which is the growth hormone ?
- Which hormone ripens fruits ?

(Or)

B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, A, C, D, K, E are the symbols of vitamins. Classify these vitamins based on their solubility in the given table and also write the diseases due to their solubility deficiency

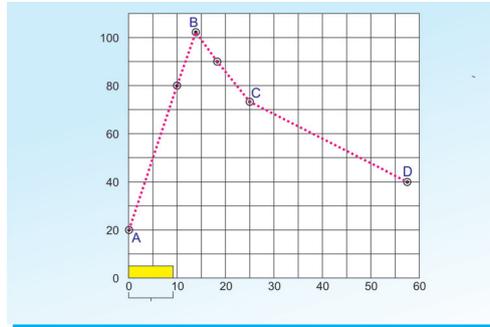
S.No.	Water soluble	Diseases by deficiency	Fat soluble	Diseases by deficiency

12. Suma decides to show that CO<sub>2</sub> is essential for formation of carbohydrates in photosynthesis but she has the following doubts to conduct the experiment. Clarify them.

- Why was the potted plant kept in dark room for week days prior to the experiment ?
- What apparatus and chemicals are used and how are they arranged ?
- How to infer at the end of the experiment?
- What is the use of KOH in this experiment ?

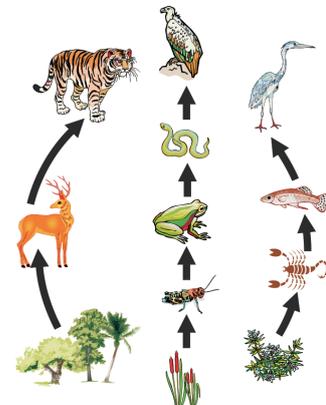
(Or)

We know that big amount of oxygen using Vigorous exercise. Basing on the following picture and explain the process of respiration during oxygen debt and effects of lactic acid.



13. With the help of this diagram, answer the questions.

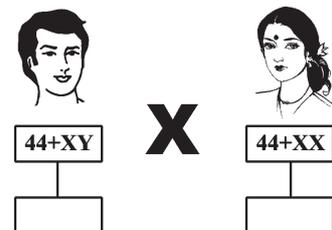
- What is the relation you observe in the pictures. What does it demote ?
- Grass → Eagle → Snake → Frog → Grasshoper  
Is it a correct order ? If not rearrange and write.
- Name the autotroph in the diagram.
- What tertiaries consumars in the figure.



(Or)

Observe the following diagram.

A newly wedded couple wants to give birth to a girl child. Draw the probable diagram showing chromosome transfer from parents to progeny. Is their wish comes true or not? Why?



**SUMMATIVE ASSESSMENT - III**  
**MODEL QUESTION PAPER**  
**X CLASS - GENERAL SCIENCE**  
**(English Version)**

**PART - B**

**TIME : 30 minutes**

**Marks : 10**

**Instructions :**

- (i) Answer all the questions.
  - (ii) Each question carries 1/2 mark.
  - (iii) Marks will not be awarded in any case of over-writing, rewritten or erased answers.
  - (iv) Write the **CAPITAL LETTER (A, B, C, D)** showing the correct answer for the following questions in the brackets provided against them.
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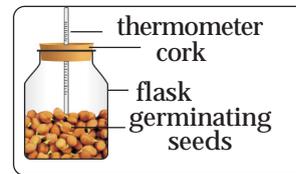
**SECTION - IV**

**NOTE :** 1. Answer **all** the questions.  
3. Each question carries 1/2 mark. 20×½ = 10 marks

- 14. Which of the following statements is not true about budding in yeast ?(     )**
- A) A bud may arise from any part of the parent cell
  - B) Before detaching from the parent body, a bud may form another bud.
  - C) A bud may separate from the parent body and develops into a new individual.
  - D) A bud arises from a particular region on a parent body.
- 15. Which one of the following seeds does not have endosperm ?**
- |                 |                 |                  |                 |                 |
|-----------------|-----------------|------------------|-----------------|-----------------|
| <b>i) Maize</b> | <b>ii) Rice</b> | <b>iii)Wheat</b> | <b>iv) Gram</b> | <b>(     ) </b> |
| A) i, ii        | B) i, iii       | C) iii           | D) iv           |                 |
- 16. Amphibians, reptiles, birds and mammals indicate a common ancestry as they have     (     )**
- A) eyes
  - B) digestive glands
  - C) locomotary organ
  - D)nose
- 17. The four important factors of photosynthesis are     (     )**
- A) light, CO<sub>2</sub>, chlorophyll and temperature
  - B) light, chlorophyll, water and temperature
  - C) light, CO<sub>2</sub>, water and chlorophyll
  - D) water, chlorophyll, temperature and CO<sub>2</sub>
- 18. What will happen if the green plant is kept in dark ?     (     )**
- A) photosynthesis will be slow
  - B) photosynthesis will stop
  - C) photosynthesis will continue
  - D) photosynthesis will increase

19. The following experiment is set up to show that the heat is given out during respiration. But there is no rise in the thermometer. This is because ( )

- A) germinating seeds have not been kept under water in the flask.
- B) the cork on the flask is made of rubber
- C) dry seeds are kept in the flask.
- D) no heating apparatus is present.



20. Use the following information to answer the questions. ( )  
Some statements regarding coal and petroleum are given below.

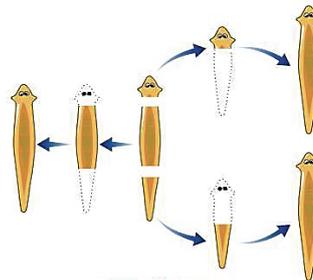
- I) Coal and petroleum are formed from the degradation of biomass of plants and animals.
- II) Kerosene and coke are obtained from coal.
- III) Petrol and diesel are obtained from petroleum.

Among the given statements

- A) only statement I is correct
- B) only statement II is correct
- C) both statements I and II are correct
- D) both statements I and III are correct

21. The given illustration represents the process of ( )

- A) multiple fission
- B) binary fission
- C) regeneration
- D) budding



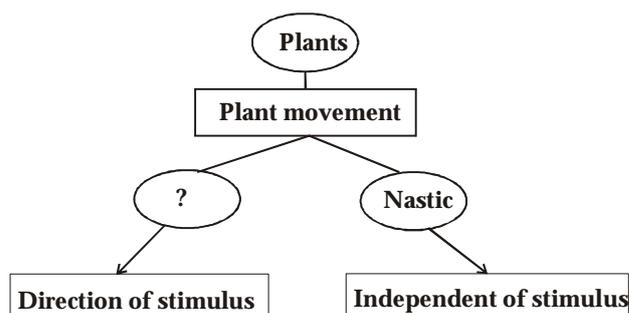
22. Read the following information ( )

A pea plant having two copies of the gene for tallness (TT) pollinates with a pea plant having two copies of the gene for dwarfness (tt). The resulting offspring, (F<sub>1</sub>) produced after pollination, was found to be tall.

Genotype of F<sub>1</sub> generation is ?

- A) tt
- B) Tt
- C) Tt or TT
- D) tt or TT

23. Read the following flow charts and answer



Guess the correct answer in the '?' box.

- A) Growth Promoters                      B) Growth Inhibitor  
 C) Tropic                                      D) Trophism

24. The correct order / sequence of different phases of human cardiac cycle.

- 1) Ventricle systole                      2) Auricle systole  
 3) Ventricle diastole                      4) Auricle diastole  
 A) 1, 2, 3, 4                      B) 2, 1, 4, 3                      C) 3, 1, 2, 4                      D) 4, 3, 2, 1                      (     )

25. What is the reason for lub - dub sound from heart beat ?                      (     )

- A) closing of tricuspid and bicuspid valves  
 B) closing of aorta and pulmonary valves  
 C) blood flows rapidly through valves  
 D) flow of blood in ventricles.

26. Match the following

List - I

List - II

1. Protozoa                      (     )                      a. Contractive vacuole  
 2. Arthropoda                      (     )                      b. Malphgian tubule  
 3. Mollusca                      (     )                      c. Metanephridia  
 A) 1-a, 2-c, 3-b                      B) 1-a, 2-b, 3-c                      C) 2-a, 1-c, 3-b                      D) 3-a, 2-c, 1-b                      (     )

27. Human Dental formula is                      (     )

- A)  $\frac{2}{2}$ ,     ,     ,                      B)     ,     ,     ,                      C)     ,     ,     ,                      D)     ,     ,     ,

28. Small amounts of chyme is pushed into the duodenum, simultaneously forcing most of it back into the stomach is called retropulsion.

Find the correct illustration for above information.                      (     )

