

**CCE RR****A**

ಕರ್ನಾಟಕ ಪ್ರೌಢ ಶಿಕ್ಷಣ ಪರೀಕ್ಷಾ ಮಂಡಳಿ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು – 560 003

**KARNATAKA SECONDARY EDUCATION EXAMINATION BOARD, MALLESHWARAM,  
BENGALURU, 560 003**

ಎಸ್.ಎಸ್.ಎಲ್.ಸಿ. ಪರೀಕ್ಷೆ, ಜೂನ್ / ಜುಲೈ, 2022

**S.S.L.C. EXAMINATION, JUNE / JULY, 2022**

ಮಾದರಿ ಉತ್ತರಗಳು

**MODEL ANSWERS**

ದಿನಾಂಕ : 27. 06. 2022 ]

ಸಂಕೇತ ಸಂಖ್ಯೆ : **83-E (Bio)**

Date : 27. 06. 2022 ]

CODE No. : **83-E (Bio)**

ವಿಷಯ : ವಿಜ್ಞಾನ

**Subject : SCIENCE**

( ಭೌತ ವಿಜ್ಞಾನ, ರಸಾಯನ ವಿಜ್ಞಾನ ಮತ್ತು ಜೀವ ವಿಜ್ಞಾನ / **Physics, Chemistry & Biology** )

( ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ / **Regular Repeater** )

( ಜೀವಶಾಸ್ತ್ರ / **Biology** )

( ಇಂಗ್ಲಿಷ್ ಮಾಧ್ಯಮ / **English Medium** )

[ ಗರಿಷ್ಠ ಅಂಕಗಳು : **80**

[ **Max. Marks : 80**

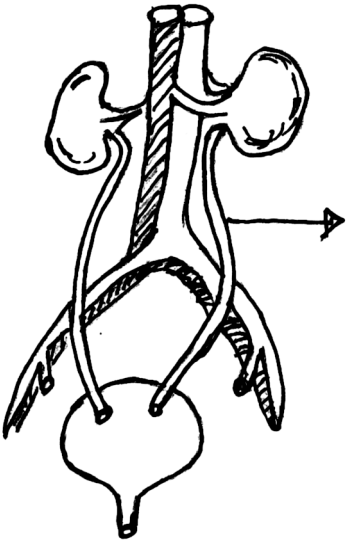
Qn. Nos.	Value Points	Total
	<b>PART - C</b> <b>( BIOLOGY )</b>	
XII.	Multiple choice :	4 × 1 = 4
24.	In plants the major function of xylem is the transportation of (A) water (B) food (C) amino acids (D) oxygen. Ans. : (A) — water	1

**RR (A)-(600)-13002 (MA) BIO**

[ Turn over

Qn. Nos.	Value Points	Total
25.	<p>An example for positive geotropism in plants is</p> <p>(A) growth of shoot (B) growth of roots into deep soil</p> <p>(C) growth of tendrils of creepers (D) upward growth of roots.</p> <p>Ans. :</p> <p>(B) — growth of roots into deep soil</p>	1
26.	<p>Primary consumers in any food chain are always</p> <p>(A) carnivores (B) herbivores</p> <p>(C) higher carnivores (D) producers.</p> <p>Ans. :</p> <p>(B) — herbivores</p>	1
27.	<p>Part of a flower in the plant that develops into fruit is</p> <p>(A) petal (B) stigma</p> <p>(C) ovary (D) style.</p> <p>Ans. :</p> <p>(C) — ovary</p>	1
XIII.	<p>Answer the following questions :</p>	4 × 1 = 4
28.	<p>Which hormone inhibits the growth of plants ?</p> <p>Ans. :</p> <p>Abscisic acid</p>	
29.	<p>What is the sex of a child born by receiving X chromosome from father ?</p> <p>Ans. :</p> <p>Female child / baby girl</p>	1

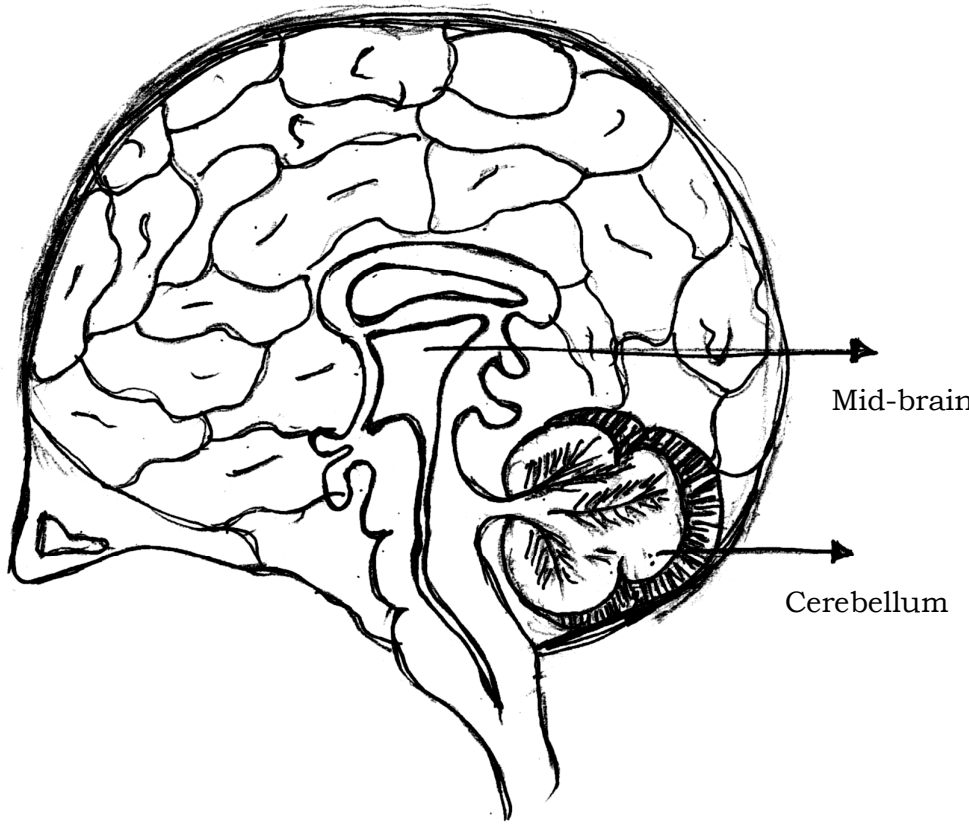
Qn. Nos.	Value Points	Total
30.	<p>Nowadays Chlorofluorocarbon ( CFC ) free refrigerators are being manufactured. Why ?</p> <p><i>Ans. :</i></p> <p>CFC's are responsible for the decrease in the amount of ozone layer which protects the earth from ultraviolet rays of sun.</p>	1
31.	<p>What is 'biological magnification' ?</p> <p><i>Ans. :</i></p> <p>Process that involves magnification ( increase ) of the harmful chemicals at different trophic levels of ecosystem.</p>	1
XIV.	<p>Answer the following questions : <span style="float: right;"><math>3 \times 2 = 6</math></span></p>	
32.	<p>Mention any two effects of non-biodegradable substances on the environment.</p> <p style="text-align: center;">OR</p> <p>Mention any two methods that reduce the problems caused while disposing the wastes.</p> <p><i>Ans. :</i></p> <ul style="list-style-type: none"> <li>★ These substances do not undergo natural recycling and remain inert in the environment.</li> <li>★ May harm the various members by adding into different stages of ecosystem / cause 'Biological magnification'.</li> <li>★ Cause environmental pollution.</li> </ul> <p>( Any <i>two</i> or consider relevant answer ) <span style="float: right;"><math>1 + 1</math></span></p> <p style="text-align: center;">OR</p>	2

Qn. Nos.	Value Points	Total
	<p><i>By adopting following methods :</i></p> <ul style="list-style-type: none"> <li>★ Segregation of dry wastes and wet wastes.</li> <li>★ Reusing of wet wastes by converting them into manures.</li> <li>★ Recycling dry wastes</li> <li>★ Limiting the use of disposable materials</li> <li>★ Following eco-friendly packagings.</li> </ul> <p>( Consider any other relevant answers )</p>	$4 \times \frac{1}{2}$ 2
33.	<p>Can the wing of butterfly and the wing of bat be considered as Analogous organs ? If yes, why ? If no, why ?</p> <p><i>Ans. :</i></p> <ul style="list-style-type: none"> <li>★ Yes, these structures are considered as Analogous organs.</li> <li>★ Because the wing of butterfly and wing of bat both are useful for flight.</li> <li>★ But their basic design / origin are not same.</li> </ul>	$\frac{1}{2}$ 1 $\frac{1}{2}$ 2
34.	<p>Draw the diagram showing the structure of human excretory system and label 'ureter'.</p> <p><i>Ans. :</i></p> <p><i>Excretory system in human beings :</i></p> <div style="text-align: center;">  </div>	$1\frac{1}{2} + \frac{1}{2}$ 2

Qn. Nos.	Value Points	Total
XV.	Answer the following questions : <span style="float: right;">3 × 3 = 9</span>	
35.	Explain the stages of 'double circulation' of the blood in humans.	
	OR	
	Mention the events that occur during photosynthesis in plants. What are the methods used by plants to get rid of excretory products ?	
	<i>Ans. :</i>	
	<i>Transportation of blood in heart :</i>	
	i) Oxygen-rich blood from the lungs comes to the left atrium. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	ii) When the left atrium relaxes and contracts then blood gets transferred to left ventricle <span style="float: right;"><math>\frac{1}{2}</math></span>	
	iii) When the left ventricle contracts the blood is pumped out to the body through aorta. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	iv) De-oxygenated blood comes from the body to the right atrium. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	v) As the right atrium contracts the blood get transferred to the right ventricle. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	vi) On contraction of right ventricle the blood go to the lungs for oxygenation. <span style="float: right;"><math>\frac{1}{2}</math></span>	3
	OR	
	★ Absorption of sunlight by chlorophyll. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	★ Conversion of light energy into chemical energy / decomposition of water into oxygen and hydrogen molecule. <span style="float: right;"><math>\frac{1}{2}</math></span>	
	★ Reduction of carbon dioxide into carbohydrate. <span style="float: right;"><math>\frac{1}{2}</math></span>	

Qn. Nos.	Value Points	Total
	<p><i>Methods to get rid of excretory products in plants :</i></p> <ul style="list-style-type: none"> <li>★ Excess of water removed by transpiration</li> <li>★ Remove oxygen and carbon dioxide gases through stomata</li> <li>★ Waste products and dead cells in vacuoles by shedding leaves / barks</li> <li>★ Resins and gums get store in old xylem</li> <li>★ Diffusing certain wastes into surrounding soil.</li> </ul> <p>( Any <i>three</i> points ) <span style="float: right;"><math>3 \times \frac{1}{2} = 1 \frac{1}{2}</math></span></p>	3
36.	<p>How does uterus prepare to receive the fertilized egg in woman ? What happens if egg does not fertilise ? Explain.</p> <p><i>Ans. :</i></p> <ul style="list-style-type: none"> <li>★ Uterus prepares itself every month to receive fertilized egg. It makes its inner layer thick and spongy. <span style="float: right;">1</span></li> <li>★ If the egg is not fertilized, it lives for about one day. <span style="float: right;">1</span></li> <li>★ If fertilization doesn't occur the lining slowly breaks and comes out through the vagina as blood and mucous.</li> </ul> <p>( Menstruation occurs ) <span style="float: right;">1</span></p>	3
37.	<p>“An individual organism cannot pass the experiences acquired during its life time to the progenies of the next generation.” Explain this concept with the help of an illustration.</p> <p style="text-align: center;">OR</p> <p>Pure ‘short’ pea plant is crossed with pure ‘tall’ pea plant. Represent the results obtained in <math>F_2</math> generation with the help of checker board and mention the ratio of the types of plants obtained.</p>	



Qn. Nos.	Value Points	Total
XVI.	Answer the following question : <span style="float: right;">1 × 4 = 4</span>	
38.	Draw the diagram showing the structure of the human brain and label the following parts : i) Cerebellum ii) Mid-brain.  Ans. :  Structure of Human Brain :	
		
<p style="text-align: right;">For diagram — 3 For labelling — <math>\frac{1}{2} + \frac{1}{2}</math></p>		4