$\Leftrightarrow$	Roll No

## HSSC-(P-I)-A/2024 (For All Sessions)

1	6	4	6	Paper Code
	6	4	6	Paper Code

## Biology (Objective)

(Group-I)

Time: 20 Minutes

Marks: 17

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or Pen ink on the answer sheet provided.

1.1. The most recent era is:

2. Monosaccharides which are rare in nature and occur in some bacteria are:  (A) Hexoses (B) Pentoses (C) Trioses (C)  3. An activated enzyme with a polypeptide chain and a co-factor is:  (A) Apaenzyme (B) Holoenzyme (C) Coenzyme (C)  4. Which of the following are involved in the breakdown of old organelles:  (A) Lysosomes (B) Glyoxisomes (C) Peroxisomes (C)  5. HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (C)  6. If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Pentirchous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (C)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basicliomycota (C) Deuteromycota (C)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (C)  11. Which of the following are not included in amholes:  (A) Birds (B) Reptiles (C) Mammals (C)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (C)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (C)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (C)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (C)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (C)  17. The narrowing and hardening of arteries is called as:	1.1	THE MOST IS	יטטווג טומ וט.				KWI-	- 1	
(A) Hexoses (B) Pentoses (C) Trioses (E)  An activated enzyme with a polypeptide chain and a co-factor is:  (A) Apaenzyme (B) Holoenzyme (C) Coenzyme (C)  4. Which of the following are involved in the breakdown of old organelles:  (A) Lysosomes (B) Glyoxisomes (C) Peroxisomes (C)  5. HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (C)  6. If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Pentirchous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (C)  8. The group of fungl in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (C)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (C)  11. Which of the following are not included in arriholotes:  (A) Birds (B) Reptiles (C) Mammals (C)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (C)  (A) Volvox (B) Nostoc (C) Spirogyra (C)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (C)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (C)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (C)  17. The narrowing and hardening of arteries is called as:		(A)	Paleozoic	(B)	Mesozoic	(C)	Cenozoic	(D)	Proterozoic
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(A) Apaenzyme (B) Holoenzyme (C) Coenzyme (E)  Which of the following are involved in the breakdown of old organelles:  (A) Lysosomes (B) Glyoxisomes (C) Peroxisomes (E)  HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (E)  If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Peritrichous (C) Amphitrichous (C)  The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (E)  The group of fungi in which sexual-reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (E)  The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  Excretory system in Arthropods is composed of:  (A) Flarne cells (B) Malpighian tubules (C) Nephridia (E)  Which of the following are not included in amhiotes:  (A) Birds (B) Reptiles (C) Mammals (E)  Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  The narrowing and hardening of arteries is called as:		(A)	Hexoses	(B)	Pentoses	(C)	Trioses	(D)	Tetroses
4. Which of the following are involved in the breakdown of old organelles:  (A) Lysosomes (B) Glyoxisomes (C) Peroxisomes (C)  5. HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (C)  6. If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Peritrichous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (C)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (C)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  (A) Flame cells (B) Malpighian tubules (C) Nephridia (C)  11. Which of the following are not included in aminiotes:  (A) Birds (B) Reptiles (C) Mammals (C)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (C)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (C)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (C)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (C)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (C)  17. The narrowing and hardening of arteries is called as:	3.	An activated	i enzyme with a po	lypeptide cha	ain and a co-factor	is:	and the same of th	and the contract of the contra	v <sub>e</sub>
(A) Lysosomes (B) Glyoxisomes (C) Peroxisomes (C)  HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (C)  (A) Abrichous (B) Peritrichous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (C)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (C)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (C)  11. Which of the following are not included in amhiotes:  (A) Birds (B) Reptiles (C) Mammals (C)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (C)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (C)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (C)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (C)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (C)  17. The narrowing and hardening of arteries is called as:		(A)	Apaenzyme	(B)	Holoenzyme	(C)	Coenzyme	(D)	Activator
5. HIV belongs to group of viruses called:  (A) DNA virus (B) Pox virus (C) Retro virus (C)  (A) Atrichous (B) Peritrichous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (C)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (C)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (C)  11. Which of the following are not included in amhibites:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (C)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (C)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (C)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (C)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (C)  17. The narrowing and hardening of arteries is called as:	4.	Which of the	e following are invo	lved in the b	reakdown of old org	ganelles:			2
(A) DNA virus (B) Pox virus (C) Retro virus (C)  If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Peritrichous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (E)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (E)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amhlotes:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:		(A)	Lysosomes	(B)	Glyoxisomes	(C)	Peroxisomes	(D)	Ribosomes
6. If the whole cell of bacteria is covered by flagella, the bacteria is called:  (A) Atrichous (B) Peritrichous (C) Amphitrichous (C)  7. The vector of "African sleeping sickness" is:  (A) Mosquito (B) House fly (C) Yellow fly (E)  8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (E)  9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amniotes:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	5.	HIV belongs	to group of viruses	s called:		and the second	in the second second	memory green	A. Company of the Com
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8. The group of fungi in which sexual reproduction is not observed:  (A) Ascomycota (B) Basidiomycota (C) Deuteromycota (E)  9. The rhizome in Adiantum is protected by: (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of: (A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amniotes: (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as: (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on: (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in: (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called: (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in: (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	7.	The vector of	of "African sleeping	sickness" is	· · · · · · · · · · · · · · · · · · ·	;			
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9. The rhizome in Adiantum is protected by:  (A) Ramenta (B) Stipe (C) Fronds (D)  10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amniotes:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	8.	The group of	of fungi in which sex	kual reprodu	ction is not observe	ed:			
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10. Excretory system in Arthropods is composed of:  (A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amniotes:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	9.	The rhizome	e in Adiantum is pro	otected by:	The state of the s				
(A) Flame cells (B) Malpighian tubules (C) Nephridia (E)  11. Which of the following are not included in amniotes: (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as: (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on: (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in: (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called: (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in: (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:		(A)	Ramenta	(B)	Stipe	(C)	Fronds	(D)	Stomium
11. Which of the following are not included in amniotes:  (A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	10.	Excretory sy	stem in Arthropod	s is compose	ed of:	A STATE OF THE STA	, , , , , , , , , , , , , , , , , , , ,	•	`
(A) Birds (B) Reptiles (C) Mammals (E)  12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:		(A)	Flame cells	(B) M	alpighian tubules	(C)	Nephridia	(D)	Nephrons
12. Dark reaction of photosynthesis occurs in the part of chloroplast named as:  (A) Stroma (B) Grana (C) Inter-grana (E)  13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (D)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (D)  17. The narrowing and hardening of arteries is called as:	11.	Which of the	e following are not i	included in a	mniotes:			**	
(A) Stroma (B) Grana (C) Inter-grana (D)  The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (D)  In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (D)  Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (D)  The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (D)  The narrowing and hardening of arteries is called as:		(A)	Birds	(B)	Reptiles	(C)	Mammals	(D)	Amphibians
13. The first action spectrum was obtained by T.W.Engelman in 1883 working on:  (A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (D)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (D)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (D)  17. The narrowing and hardening of arteries is called as:	12.	Dark reaction	on of photosynthesi	s occurs in th	ne part of chloropla	st named	as:	*	
(A) Volvox (B) Nostoc (C) Spirogyra (E)  14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:		(A)	Stroma	(B)	Grana	(C)	Inter-grana	(D)	Inner membrane
14. In cockroach partly digested food is temporarily stored in:  (A) Colon (B) Crop (C) Gizzard (E)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (E)  17. The narrowing and hardening of arteries is called as:	13.	The first act	ion spectrum was o	obtained by 1	r.W.Engelman in 1	883 worki	ng on:		
(A) Colon (B) Crop (C) Gizzard (D)  15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (D)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (D)  17. The narrowing and hardening of arteries is called as:		(A)	Volvox	(B)	Nostoc	(C)	Spirogyra	(D)	Chlorella
15. Respiratory pigment present in muscles is called:  (A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (D)  16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (D)  17. The narrowing and hardening of arteries is called as:	14.	in cockroac	h partly digested fo	od is tempor	arily stored in:				
(A) Haemoglobin (B) Haemocyanin (C) Haemoerthrin (E)  16. The left systematic arch disappears in: (A) Birds (B) Fish (C) Mammals (I)  17. The narrowing and hardening of arteries is called as:		(A)	Colon	(B)	Crop	(C)	Gizzard	(D)	Rectum
16. The left systematic arch disappears in:  (A) Birds (B) Fish (C) Mammals (I  17. The narrowing and hardening of arteries is called as:	15.	Respiratory	pigment present in	muscles is	called:				
(A) Birds (B) Fish (C) Mammals (I 17. The narrowing and hardening of arteries is called as:		(A) ł	Haemoglobin	(B)	Haemocyanin	(C)	Haemoerthrin	(D)	Myoglobin
17. The narrowing and hardening of arteries is called as:	16.	The left sys	tematic arch disapp	ears in:					
(C) Atherendered		(A)	Birds	(B)	Fish	(C)	Mammals	(D)	Reptiles
(A) Apoptosis (B) Necrosis (C) Atherosclerosis (I	17.	The narrowi	ing and hardening o	of arteries is	called as:				
AAA 44 1		(A)	Apoptosis	(B)	Necrosis	(C)	Atherosclerosis	(D)	Sclerosis

K

Roll No		HSSC	Marks: 68	
Koli	NO	(For		
Bio	ology (Subjective)	(G	ROUP-I)	Time: 2:40 Hours
		SECTION	- RWP-	1-24
2.	Write short answers of any e		1	(8x2=16)
i.	What are terpenoids? Give two ex	•	•	
ii.	Draw diagrammatic representation	•	ubstrate reaction (Lock	and Key Model)
iii.	How enzyme concentration affects	· ·	•	•
iv.	What are inhibitors? Give their typ	es. v. [	Differentiate septate and	non septate hyphae
vi.	Compare obligate parasites with fa		AND CAMPAGE	ě
vii.	Differentiate polyps and medusae.		low infestation is differe	nt from disinfestations?
ix.	What do you know about pinworm	s? x. h	lame the scales of fish.	
xi.	The oxygen releases during photo	synthesis comes f	om water, how you prov	/e?
xii.	What is the importance of phospho	orylation in energy	driving reactions?	A
3.	Write short answers of any el	ight parts from t	he following:	(8x2=16)
i.	What is biological method? Name	its steps in order.	ii. What is biologica	I control? Give an example.
iii.	How outer membrane of mitochon	dria differs from in	ner membrane?	1:
iv.	Why peroxisomes are called so?	· .	v. Write two charact	eristics of protozoa.
vi.	Give at least two examples of Dino	oflagellates. Which	pigments are found in the	nem?
vii.	In which group, the giants of protis	t kingdom are inclu	ided? Name any giant p	rotist.
viii.	Why pelomyxa palustris may be th	e most primitive of	all eukaryote-like forms	?
ix.	How breathing is different from cel	lular respiration?	60.	
Χ.	What changes occur in animal dur	ing diving reflex?	350	
xi.	What is brain haemorrhage? Give	its preventive mea	sures.	
xii.	What is pericardium? Write its fund	ction.	4 ,44 .44	
4.	Write short answers of any si	x parts from the	following:	(6x2=12)
i.	How virion differs from prion?	ii.	What are plasmids? Gi	ve their role
iii.	Give two important features of Lyc	opsida. iv.	Differentiate over toppi	ng and plannation.
٧.	What are paraphyses? Give their for	unction. vi.	Compare homospory w	rith heterospory.
vii.	Give the role of secretion in digesti	on. viii.	How pepsinogen is con	verted into pepsin?
ix.	Differentiate herbivores and carnive	ores with example.		
		SECTION	11	
Note	Attempt any three questions. Each of	question carries equ	ıal marks:	(8x3=24)
5. (a)	How diseases can be controlled?	Give preventive me	asures.	(2+2=4)
(b)	Explain respiration in cockroach. D	raw its labeled dia	gram.	(2+2=4)
6. (a)	Describe three main types of RNA.			(4)
(b)	Discuss important features of asco	mycota.		(4)
7. (a)	What are plastids? Discuss their type	pes and functions.		(1+1+2=4)
(b)	How digestion in Duodenum takes	place? Write role of	f liver and pancreas.	(1+3=4)
8. (a)	Discuss the structure of a virion			(4)
(b)	Define immunity. Discuss its types.			(1+3=4)
9. (a)	Describe habitat, occurrence and re	eproduction in Nos	toc	(1+1+2=4)
(b)	Sketch various steps of Krebs' cycle	e 830-11-4	<i>r</i>	(2+2=4)

<del>ተ</del> ተ	Roll No

HSSC-(P-I)-A/2024 (For All Sessions)

Paper Code

## Biology (Objective)

(Group-II)

Time: 20 Minutes Marks: 17

Note:	Write A	nswers to the Question	s on the objective or sponding circ	ve answer sheet pro cle A, B, C or D give	ovided. Hour p n in front of ea	ossible answers A, B, ich question with Marke	er or Pen in	k on the answer sheet provided
1.1	Reser	ve food material in cy	vanobacteria is	in the form of:				
	(A)	Starch	(B)	Proteins	(C)	Sucrose	(D)	Glycogen
2.	Malar	ia spreads by :						
	(A)	Plasmodium	(B) Fema	ile anopheles mos	quito (C)	Tsetse fly	(D)	Trypanosoma
3.	Which	of the following is ur	nicellular but no	ot included in proto	octista?		Name of Street o	
	(A)	Kelps	(B)	Volvox	(C)	Yeast	(D) `	Plasmodium
4.	Most	powerful Alkaloids are	e obtained from	n plants of family o	alled:	to see her to be a second or	No. of	1
	(A)	Solanaceae	(B)	Fabaceae	(C)	Rosaceae	(D)	Poaceae
5.	Spher	nodon is found in:					E. N.	
	(A)	Australia	(B)	Texas	(C)	New Zealand	(D)	Pakistan
6.	Syrinx	is an organ of voice	present in:		Section 200	and the second	17	The same of the sa
	(A)	Apes	(B)	Parrots.	(C)	Snakes	(D)	Frogs
7.	Trans	fer of energy from an	tenna complex	to reaction center	of Photosys	tem occurs by pheno	menon ca	
	(A)	Oxidation	(B)	Reduction	1	Resonance	(D)	Hydrogenation
8.	How r	nany number of elect	rons would be	needed at a time	to reduce two	moles of NADP+?		
	(A)	Two	(B)	One	(C)	Three	(D)	Four
9.	Const	ipation is called by th	e excessive ab	osorption of:				
	(A)	CO2	(B)	Water	(c)//	Food.	(D)	Oxygen
10.	if plas	ma proteins carry ab	out 5% CO <sub>2</sub> / 1	100 ml of blood. H	ow much CO	$\theta_2$ is carried by 500 m	ni of blood	from tissue fluid to lungs?
	(A)	5 ml	(B)	20 ml	(C)	25 ml	(D)	100 ml
11.	Which	layer of arteries bec	ome thick due	to Atheroma?				
	(A)	Middle	(B)	Inner most	(C)	External	(D)	Any layer
12.	lf ψw	(water potential) of a	cell is - 400 k	(Pa and pressure	potential (ψ <sub>P</sub>	) is 800 KPa. What	would be	the solute potential (ψ <sub>s</sub> )
	of cell (A)	at equilibrium: 1200 KPa	(B)	-400 KPa	(C)	1200 KPa	(D)	800 KPa
13.		of the following elen		metal?				
10.		Zinc	(B)	Iron	(C)	Copper	(D)	Chromium
	(A)						many nun	nber of hydrogen bonds
14.	would	be present between	these compler	nentary nitrogeno	us Dases?			14
	(A)	08	(B)	12	(C)	10	(D)	14
15.	Rate	of reaction (catalysis)	is inversely pr	oportional to the:			0. • decouple.com	(D) Optimum nH
	(A)	Activation energy	• •	me concentration		Optimum tempera		(D) Optimum pH
16.	If ocu	lar lens is of 10X and	objective lens	e is of 40X, resolu		ound microscope wo		of human naked eye.
	(A)	100X	(B)	400X	(C)	500X	(D)	250,000X
17.	Which	n of the following is a	n organelle of s	symbiontic origin?				.**
	(A)	Ribosomes	(B)	Mitochorndria		Centrioles	(D)	Lysosomes
				8	31-11-A	J-		

Poll No	)	HSSC-(P-I)-A		Marks : 68
NOII NO		(For All Sess		
Riol	logy (Subjective)	(GROUF	-11 <i>)</i>	ime: 2:40 Hours
<b>D</b> 10.	logy (oubjective)	SECTION-I	EWP-2-24	
_	Write short answers of any e		•	(8x2=16)
	What is the difference between fit	rous proteins and globula	ar proteins?	
i.	What are inhibitors? Write their tw		entiate between apoenzyme & hol	oenzyme.
ii.	The low and high temperature res			
ÌV.	Enlist four types of asexual reproductive	fuction in funcion Vi. W	Vhat is aspergillosis? Name the fungus	s which causes it.
٧.	Enlist four types of asexual repro-			
vii.	Enlist four examples of sponges was Define polymorphism. What is the	concric name of 'Portug	uese man of war?	
viii.	Give names of any two sub-class	ee of mammalia		1
ix.	What is Notochord? State its fund		entiate between catabolism and ar	nabolişm.
Х.	What is Notochoru? State its fund	occurs in muscle cells of hun	nan during sprinting? Also represent it	by equation.
xii.	Write short answers of any	hight parts from the to	flowing:	(8x2=16)
3.	How does Phyletic Lineage extend by	ack to the common origin of	all early life?	The same of the sa
i.	Write down attributes of population.	dok to the comment	mark 1	( )/
Ü.	How cell cytoplasm play role in co	ell physiology?		and the same of th
iii.	What is chemical composition of	hacterial (Prokarvote) cell	I wall?	
iv.	How would you differentiate fung	us-like protists and fungi?		
٧.	What are amoebas? Give their ty			
vi.	What functions are performed by	micronuclei and macronu	uclei in ciliates?	
vii.	Why Euglenoids are placed in Al	nae as well as in Protozoa	ar	
Viii.	How does temperature affect the	oxygen carrying capacity	of Haemoglobin?	
ix.	How does the skin of earthworm	is kept moist for the exch	ange of respiratory gases?	
X.	Differentiate Antigen and Antiboo			
XI. XII.	What is the difference between s	ingle circuit and double ci	rcuit Heart?	ž.
ді. 4.	tel to the service of about	narte from the following	owing:	(6x2=12)
i.	What are the nocks? Give their of	ause. ii. Write the di	fference between archaeo bacteri	a & eubacteria?
i. iii.	Differentiate the Archegonia and	Antheridia. iv. Who	at is circinate vernation? Give an e	example.
٧.	What do you know about annulu	s and stomium? vi.	How can adipose tissue is formed	?
v. vii.	Which plants are called superma		nat are hunger pangs? When do th	ney begin?
ix.	Why humans develop intestinal (	as from consuming milk	products?	
ıx.	verily fiditionic develop wheeling	SECTION-II		
Note	Attempt any three questions. Eac	h question carries equal m	iarks:	(8x3=24)
5. (a)	What is an organ? Discuss organ	n and organ system level	of organization.	(2+2=4)
(b)	How $CO_2$ is transported from tis	sues to lungs?		(4)
6. (a)	What is RNA? Describe its three	types. (b) Giv	ve economic losses due to fungi.	(1+3=4) & (4)
7. (a)	What are plastids? Give three type	es & explain chloroplast in	detail and draw its labeled diagram.	(1/2+1/2+2+1=4)
(b)	Explain role of pancreas and live	er in digestion in human b	eings.	(2.2.1)
(b) 8 (a)	AIDO			(4)

· (2+2=4) (b) Discuss symptoms and reasons of Leucaemia and thalassaemia. (4) 9. (a) Discuss nutrition in bacteria. (1+3=4) What is photophosphorylation? Discuss non-cyclic photophosphorylation in plants. 832-11-A