components.

## 2024

(FYUGP)

Describe the transpart of oxygen and carbon dioxide in bloc(ratement) 5+5-10

3. With a well labellYDOJOO describe the structure of nephron and excisin its role in urine formation. (roniM)

Paper Code: ZOO/M5

( Animal Physiology—II : Life Sustaining System )

Full Marks: 75

Time: 3 hours

bus (PART : B—DESCRIPTIVE ) discussions

( Marks : 50 )

The figures in the margin indicate full marks

for the questions

1. Describe the process of carbohydrate digestion and absorption in human digestive system.

5+5=10

Explain the various phases of protein digestion and highlight the role of enzymes involved in each phase love asilogo admost 10

S. With a well-labelled, dogman, describe the

2. Explain the mechanism of breathing in human.

(Turn Over)

Or

Describe the transport of oxygen and carbon dioxide in blood.

5+5=10

3. With a well labelled diagram, describe the structure of nephron and explain its role in urine formation.

6+4=10

Or

Draw a neat diagram and explain the structure of kidney. Add a note on the regulation of water balance in the body.

7+3=10

4. Describe the composition of blood and explain the functions of its major components.

7-

Discuss the ABO blood group system including the antigenic determinants and blood-type compatibility.

5. With a well labelled diagram, describe the structure of mammalian heart.

Or

Describe cardiac cycle.

\* \* \*

Be/200/MS/271

```
Name of the hope of 2020 and the stemplates the secretion of gastrue and mathe stemachers
          divioussion cut (FYUGP)
                                     secretin
          (5th Semester)
                                               (0)
                                       miliseni
                         ZOOLOGY
                                       PRETITI
                         (Minor)
     3. Thypsinogen is activated into trypsin in the
          Paper Code : ZOO/M5 stri llague
                                       (a) Pepsin
   ( Animal Physiology—II : Life Sustaining System )
      7. The printer of the large street of the long
         ( PART : A—OBJECTIVE ) VIIIA
    4. The majority of 25. Marks : 125.) o viriojem and .4
                                      the blood as
The figures in the margin indicate full marks for the questions
                           bicarbonate ions
 I. Put a Tick (/) mark against the correct answer in the
   brackets provided: behaved nidolgomesd. (5)
                               (d) carbonic acid
     1. What is the main function of bile in the digestive
   What percentage of oxygen is trans? sessorq the
                     blood bound to haemoglobin?
        (a)
             To digest starch
                                     (a) 98-99%
            To break down protein
        (b)
                                     1630 losom
            To emulsify fats
                                  (c) 70-78(% 1)
        (c)
            To neutralize stomach acid (())
        (d)
```

/271

(8)

2.	Nam	etion of gastric acid in the stomach is
	(a)	secretin (F(UG)F)
	(b)	(5th Ser(lest)r ) XOO
	(c)	insulin ( )
	(d)	gastrin Y(OJ)OS
•		( Minor )
3.		sinogen is activated into trypsin in the lintestine by which enzyme?
		Pepsin ( )
om )	(b)	Enterokinase ( ) ohievdq temina
	(c)	Lipase ( )
	(d)	Amylase TOTUE (OTT) TRACE
4.	The	majority of carbon dioxide is transported in blood as
nestions	(a)	dissolved in plasma nigrom shi ni senugit shi
the l×15=15	(b) (c)	I. Put a Tick (*) mark against the correct answ brackets (nov)ded bednuod nidolgomean
	(d)	carbonic acid ( )
tive	diges	1. What is the main function of bile in the
5.		t percentage of oxygen is transported in the d bound to haemoglobin?
	(a)	98–99% ( )
	(b)	(b) To break down protein %26-08
	(c)	(c) To emulsify figts ) (\(\frac{1}{2}\) \(\frac{1}{2}\)
	(d)	(d) To neutralize (ston)ach a % 68-86
		하는 것이 없는 경기를 가는 사람이 되었다. 그는 사람이 되었다면 나를 받는 것이다.

6. Which of the following factors causes a rightward shift in the oxyhaemoglobin dissociation curve?
(a) Decreased carbon dioxide levels (b) Increased pH
(b) Increased pH (b) (c) Increased 2,3-bisphosphoglycerate
(d) Decreased body temperature ( )
7. The primary site for reabsorption of water, ions and nutrients in the nephron is
(a) proximal convoluted tubule (PCT) (b) line AB has (c) (c) A antigens and anti-B antibodies (d) (e) (f. (C) distal convoluted tubule (DCT) (d) (e) (e) (f. (d) (
(c) A and (3 an) igens toub ugnited (b)
(d) no antigen, but both anti-A and anti-B anti-B anti-B anti-bothes, artibodies, artibodies anti-beth some the second with the new contains the new contains 12. Haemolytic disease of the new contains and the new contains and the new contains are contained to the new contains and the new contains are contained to the new contains and the new contains are contained to the new contains and the new contains are contained to the new contains and contains and contains are contained to the contained
(a) Cortex ( ) Cortex ( )
(a) ABO incompatibility a silubem (d)
(c) Renal pelvis
(d) (Renal capsule and (the let) be woll (b)

ь 9	The structural and functional unit of kidney is
nid	(contraction curve) in (sociations)
(-	(b) renal pyramid ( ) (c) Decreased carbon dioxide levels (a)
	(d) collecting duct Hq begennia (d)
10.	(c) Increased 2,3-bisphosphoglycerate Which plasma protein is essential for blood clotting?
(	(a) Fibrinogen (b)
	(b) Albumin ( )
enoi	The state of the s
	(d) Haemoglobin and (n) program bas
(	(a) proximal convoluted tubule (PCT) (
11.	A person with blood type AB has
,	(a) A antigens and anti-B antibodies ()
	(b) B antigens and anti-A antibodies ()
	(c) A and B antigens, no antibodies ()
	(d) no antigen, but both anti-A and anti-B antibodies ( ) antibodies ( ) 8. Which region of the kidney contains the
12.	Haemolytic disease of the newborn (HDN) is primarily caused by
	(a) ADO important 11 '1'
	(b) Rh incompatibility ( )
	(c) high levels of fibrinogen
	(d) low levels of platelets and L(1981) (b)

13. Which blood vessel carries deoxygenated blood from the heart to the lungs?
(a) Aorta ( )
(b) Pulmonary artery ( )
(c) Pulmonary vein ( )
(d) Superior vena cava ( )
14. Where is the sinoatrial (SA) node located?
(a) Right atrium ()
(b) Left atrium ( )
(c) Right ventricle ( )
(d) Left ventricle ( )
15. Which of the following correctly describes the first heart sound (S1)?
(a) Closure of the semilunar valves ()
(b) Opening of the AV valves ()
(c) Opening of the semilunar valves ()
(d) Closure of the AV valves ()
Bs/ZOO/M5/271

Bs/ZOQ/M5/271

II. Write short notes on any five of the following: 2×5=10
1. Absorption of vitamins
(a) Aurta (bimsaya lanan (d)
(b) Pulmonary briefy gardger (c)
(c) Pulmonary vein 1946 poursedies, (5)
(d) Superior venducavar mineral control
for With the gold ( )
14. Where is the sinbatrial (SA) node located?
(a) Right atrium development of
(b) Left strium ( )
(c) Right ventricle (makes) (n)
(d) Left-ventricle as not endpited (b)
A mind Marriagone, and and Swaper.
15. Which of the following correctly describes the first heart sound (S1)?
(a) Closure of the semilunary valves $-(a)$
(b) Opening of the AV valves OEA ( 10)
(c) Opening of the semilunar valves (a) (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
(d) Closure of tipe AV valves of (b)

2. Respiratory pigments montes ni somysual .

- 3. Enzymes in gastrointestinal tract
  - 1. Absorption of ritarios

4. Osmoregulation

5. Hacmostasis

5. Haemostasis

6. Rh factor

L Electrocardiogram

7. Electrocardiogram

6. Rh lactor

(13)

8. Blood pressure

