

THE PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
UKEREWE DISTRICT COUNCIL



FORM THREE EXAMINATION
BIOLOGY
PROPOSED MARKING GUIDE

1. 10 MARKS @ 1 MARK

ITEM NO	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANSWERS	C	D	C	A	B	A	B	A	C	B

2.

I	Ii	Iii	Iv	V	Vi
D	H	F	B	E	C

(06marks 01@mark)

3. (a) (i) Kidney has large afferent arterioles and narrow efferent arteriole.
(ii) Highly coiled and permeable glomerulus.
(iii) Thin epithelium which reduces diffusion distance
(iv) Connection of urinary system with collecting duct which enable continuous function of nephron
(v) Kidney has numerous nephron
(vi) It is well supplied with blood capillaries for maximum absorption.

Any four points 1mark@ =4

(b)

- i. Blockage of fallopian tube
- ii. Low sperm count in man
- iii. Blockage of vas-diferens
- iv. Use of contraceptives
- v. Diseases
- vi. Premature ejaculation
- vii. Hormonal abnormalities
- viii. Impotence
- ix. Infertility.

Any five points 1@ =5 marks

4. (a) i. Carbon dioxide
ii. oxygen
iii. nutrients

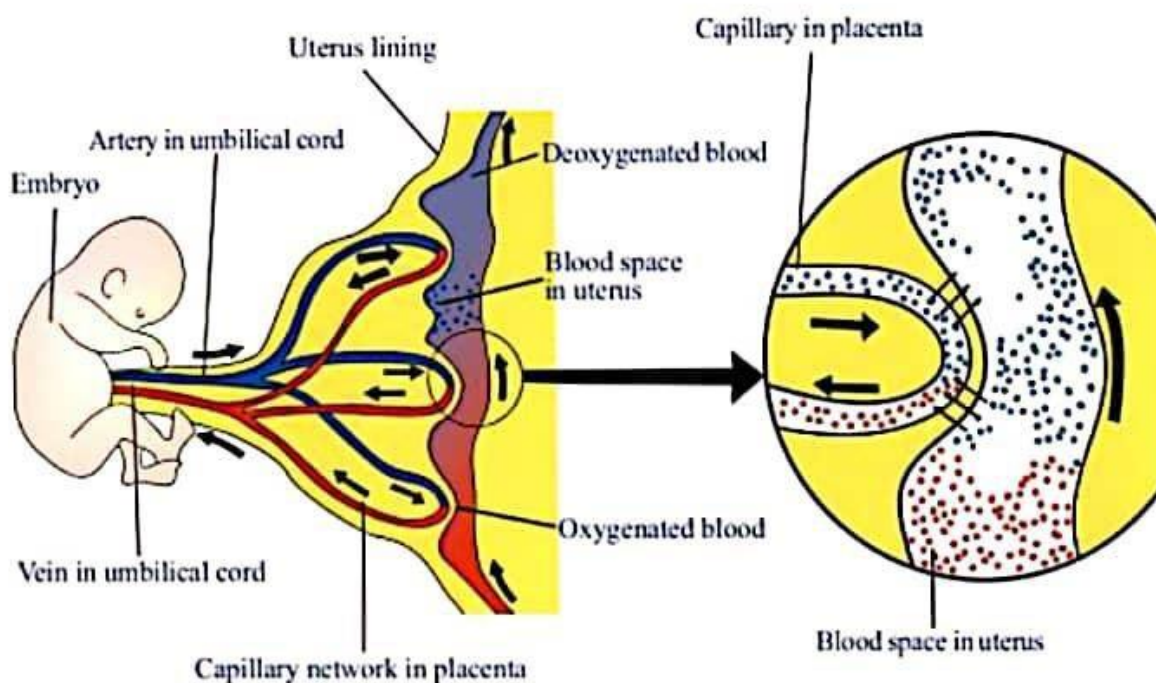
(02marks 0.5@mark)

- iv. Water molecule
 - v. Hormones
 - vi. Urea
- (b) ii. Have villi which increase the surface area for diffusion of the materials

Have thin placental membrane which reduce the distance across the area of exchange.

Have blood vessel for transportation of materials exchanged. (03marks 01@mark)

(c). diagram of exchange of substance between the blood of the embryo and the mother



Caption and Labelling (05marks)

5. (a) First aid kit (0.5mark)

First Aid kit; is a small box in which items used for first aid are kept

(0.5mark)

(b) Madam Lydia will use

ITEM	HOW TO USE
(i) Pain killer	To reduce/relieve pain
(ii) Cotton wool	To dry wound and cleaning it
(iii) Iodine tincture	Cleaning wound and preventing infection

(iv) Scissors or razor blade	Cutting dressing materials such as gauze, bandages, plaster and threads
(v) soap	Washing hands, wound and equipment
(vi) Disposable sterile gloves	Covering hands to avoid infection of wound and prevent direct contact with a victim's body fluid
(vii) Plaster	Covering small wound
(viii) Bandages	Keeping dressing in place and securing fractures or dislocated bones

Any 4 items. 1mark@=4marks

(c)Significance of the process done by madam Lydia.

- (i) It saves life
 - (ii) It encourages the victim
 - (iii) It prevents severe bleeding
 - (iv) It reduces fear of death
 - (v) Prevents victim's condition from become worse
 - (vi) Reduces
- @1 = Any five points= 5 marks**

6 (a) Muscle cramps(02@marks)

- (b) Prolonged exercise
 Lack of salt in the body
 Injury
 Dehydration (04marks 01@mark)

- (c). Stretching and warming the affected muscles
 Drinking solution of salts
 Gentry massaging the muscles (03marks 01@mark)

7 (a) Functions of the blood components 1 @ = 4 marks

- i. Red blood cell helps in transporting of oxygen and carbondioxide
- ii. White blood cell fights against diseases
- iii. Platelets helps in clotting of blood
- iv. Plasma transport of material eg wastes

(b) importance's of blood circulation 1 @ =0 5 marks

- i. Transportation of nutrients from the ileum to other parts of the body
- ii. Transportation of oxygen from lungs up to other parts of the body
- iii. Distribution of heat in the body
- iv. Transportation of hormones from the endocrine gland to the site they are required

v. Distribution of white blood cells and antibodies in whole the body

8. (a) Student is supposed to explain the effect of poor waste disposals

- i) Poor waste disposal cause eruption of epidemic diseases such as cholera
- ii) It destroy/ degrade the natural beauty of the environment
- iii) It causes water and air pollution. Example if rotten organic matter such as discarded vegetables and dead animals are kept for a long time
- iv) It endangers wild life and domestic animals.
- v) Results to breeding sites of vectors such as cockroaches, rats and house flies
- . vi) It causes floods during rain season especially when waste disposed in drainage channels
- vii) Affects aquatic environment hence endanger aquatic life. **Any six points 1mark @ =6**

marks

(b) 3 principles

- i) Recycling; Changing of wastes into usable products, eg. Broken glass can be melted to make new glass bottles.
- ii) Reducing: Act of minimizing the amount of waste produced e.g. Use of woven baskets instead of plastic bags
- iii) Reusing: Use of wastes in other productive(beneficial) purpose. E.g Use an empty margarine container to store sugar or salt

Any three points 1 mark @ =3 marks

SECTION C (30MARKS)

A student should attempt only two question from this section

9. (a). introduction **2 marks**

Importance of excretion

- Facilitate the removal of toxic wastes
- regulate water contents of the body fluids
- regulate movement of water and mineral salts in the cell membrane
- prevent damage of organs eg liver
- support gaseous exchange in the lungs

3 points 2marks@=6

b)adaptive features of urinary system

- presence of pair of kidney for filtration and reabsorption
- presence of ureter for passing urine to urinary bladder
- presence of urinary bladder for storing urine
- presence of urethra for discharging urine out of the body

3 points 2marks@=6

Conclusion 1 mark

10. Roles of the skin in the human body 15 marks

- i. It acts as a barrier against pathogens
- ii. It shields underlying tissues and organs from physical damage
- iii. It prevents dehydration by minimizing water loss
- iv. It helps to regulate body temperature
- v. It contains receptor cells which detect various sensations including touch, pressure, pain and temperature
- vi. Plays a crucial role in production of vitamin D
- vii. It eliminates small amount of waste products such as salts, urea through sweat.
- viii. It contains immune cells that help defend the body against infections.

11. *Introduction:* Meaning of drug, drug abuse and examples (2 marks)

Conclusion: ways of combating drug abuse or any relevance (1 marks)

Ways of taking drugs

- Through injection
 - Through sniffing
 - Through smoking and taking orally
- (2 marks @ =6marks)**

Proper ways of taking drugs

- Never taking expired drugs or use drugs that has no identification
- Use drugs only as prescribed by a doctor
- Always keep drugs away from reach of children □ Don't take drugs unnecessarily

Any three points (2marks @ =6 marks)