

LMS ID: 30012- Maria Saedique- OB 53.

Mock Paper: GKI: General Science and ability.

Qs4.(a) What are causes of Land pollution?

Land pollution is spreading due to many reasons few of them are as follow:

(i) Agriculture activities: With growing human population, demand for food has increased considerably. Farmers often use high toxic fertilizers and pesticides to get rid of insects. Overuse of these chemical result in contamination and poisoning of soil.

(ii) During mining activities of extraction and mining several space are created inside and extract are littered on surface.

(iii) Each household produces tonnes of garbage each year. Garbage like aluminium, paper, wood should be collect and sent for recycling.

(iv) Industrialization Due to increase in demand for food, shelter and house more goods are produced. This result in create of more waste that need's to be disposed off.

(5) Due to the increase in urbanization, large amount of construction activities take place.

(6) Nuclear waste: Nuclear plants can produce toxic material which is buried under earth. The leftover radioactive material contains harmful and toxic material that can affect human health.

(7) Sewage treatment: Large amount of solid waste is left over once the sewage has been treated. The leftover material is sent to landfill site which end up in polluting the environment.

(8) Other reason of land pollution are acid rain, soil corrosion and volcanic eruption etc.

(4) (1) What are main goal of COP 27?

(1) The main goal of COP 27 is to reduce Greenhouse gases emission.

- (ii) Give financial assistance to developing countries to establish a fund which is
- (iii) Climate change should be mitigated by limiting global warming well below 2 degree celsius and countries should work hard to keep the 1.5 degree target alive.
- (iv) One of the main focus areas is the promise of innovation and clean technology as well as the centrality of water and agriculture to the climate crisis.

c. Write the role of GIS in environmental science?

GIS stands for Geographic Information System which is used to collect information through satellite.

GIS play an important role in environmental science which is

Use to observe climate change. GIS also identify the mineral rich area, and important for environmental mapping and infrastructure planning. It is used to store data. Main component of GIS are Hardware, Software, Database, Network and Procedures.

d. What are the fundamental of Artificial intelligence?

Artificial intelligence is the refers to simulation of human intelligence in machine that are programme to think like human's and mimics their action and it is fundamental of artificial intelligence. Its main purpose is to rationalize the machine in their action.

Some fundamental of artificial intelligence are as follow:

- (1) It recognize the voice of the people.
- (ii) AI can play game like Chess board.

(1/17) AI is reactive machine  
which express his view

Qs 5:

1a) Give structure and function  
of human ear?

Human ear is organ of hearing  
and balance. The part of  
the ear include

a. External or Outer ear. It is  
is part of ear which is seen  
Pinna or outside. This is the outside  
part of ear.

External auditory canal or tube. This is  
the tube that connect the outer  
ear to the inside or middle  
ear.

Tympanic membrane. The tympanic  
membrane divide the external  
ear with middle ear.

(b) Middle ear.

(c) Inner ear.

Function of Human ear.

The main function of ear

is hearing. It send the message  
of other people to  
brain.

(b) What is digestive system? What  
is role of small intestine in  
digestion?

Digestive system is a system  
in which larger food particles  
are converted into small  
absorbable particle. It has  
following components.

Oral cavity, Liver, Esophagus,  
stomach, small intestine, pancreas,  
large intestine.

Role of small intestine in  
digestion:

The small intestine carries out  
most of digestive process, absorbing  
almost all of the nutrient  
you get from food into  
your bloodstream. The walls  
of small intestine make

digestive juices or enzymes that work together with enzymes, from the liver and pancreas to do this. The small intestine is further divided into three parts.

- (i) Duodenum
- (ii) Jejunum
- (iii) Ileum.

Q. 5 (c) Write a short note on vitamins?

Vitamins are essential because they perform many chemical reactions. These are also essential for human growth.

Our body needs small amount of vitamins but their importance is more. It works as a cofactor.

They do not provide energy to the body.

There are two types of vitamins.

### Fat Soluble Vitamins

- (i) These vitamins are only soluble in fat
- (ii) It include. A, D, E, K.
- (iii) Excess amount is store in the body fat, liver and kidney
- (iv) These are breakdown by bile which is secreted by liver.

### Water Soluble Vitamins

- (i) These vitamin dissolve in water.
- (ii) It group include vitamin C and B complex
- (iii) It do not store, excess amount secrete through urine.

### d. Describe the function pituitary glands?

Pituitary gland is also known as master gland. It's size is equal to size of pea. It has multiple function. It secrete the specific gland to perform specific task like it ask throxine gland to secrete it secretion when



its amount is less in human blood.

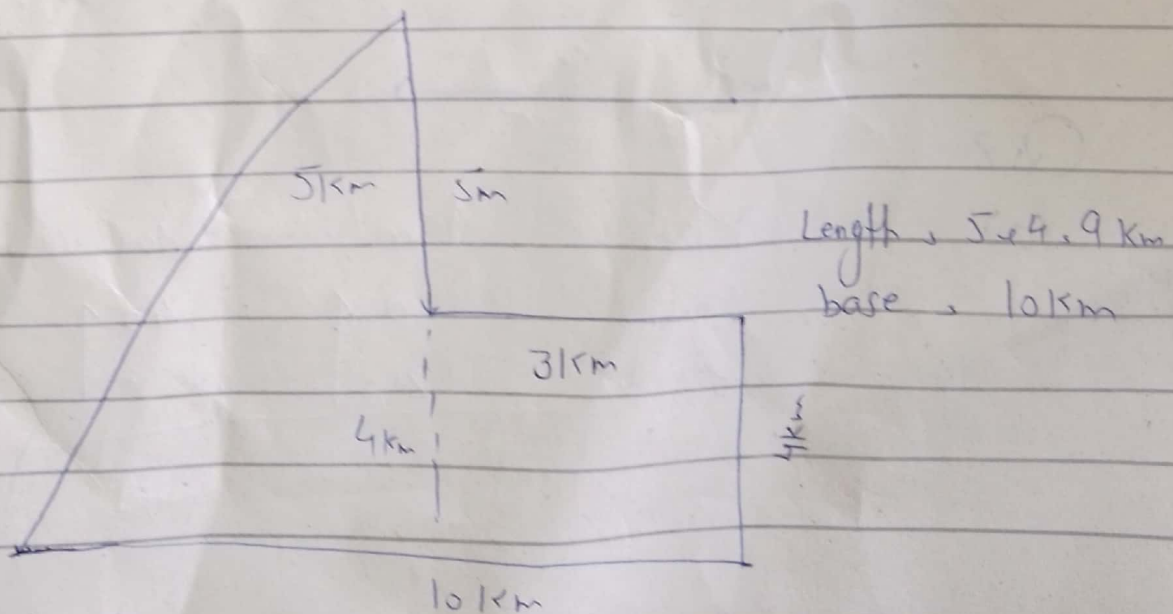
Similarly, certain gland give also to skin like melanophore stimulating hormone.

Oxytocin: It is secreted in women. It causes the contraction and expansion of the muscles of uterus during child birth. It also causes the ejection of milk from the mammary glands.

## Section II

Qs 8:

I: Solution:



(a) He was in direction  
of southwest

(b) Distance

$$h^2 = b^2 + (a)^2$$

$$h^2 = (10)^2 + (9)^2$$

$$h^2 = 100 + 81$$

$$h^2 = 181$$

$$h = \sqrt{181}$$

Qs 8  
(a)



$\frac{17}{5}$

1st five prime no = 2, 3, 5, 7, 11

Arithmetic mean =  $\frac{2+3+5+7+11}{5}$  =  $\frac{\text{Sum of}}{\text{no of}}$

$$= \frac{28}{5} = 5.6$$

Qs 8  
(c)



Men	Km	days
50 ↓	20 ↑	40 ↑
70 ↓	20 ↑	x ↑

$$\frac{50}{70} \times \frac{20}{20} = \frac{11}{40}$$

$$\frac{59}{72} \times \frac{20}{20} \times 40 = 11$$

$$\frac{200}{7} = 11$$

$$\boxed{28.5 = 11}$$

(d)

— x ————— x —

Property worth, 17,50,000

Debt = 1,50,000

Remaining: 17,50,000 - 1,50,000

= 16,00,000

Share of son =  $\frac{2}{3}$  share of daughter = 1

Sum, 2+1 = 3

Share of son,  $\frac{2}{3} \times 16,00,000$

=  $\frac{32,00,000}{3}$

= 1066666.66

Share of daughter =  $\frac{1}{3} \times 1,600,000$

= 533333.33

Qs 7:

(d)

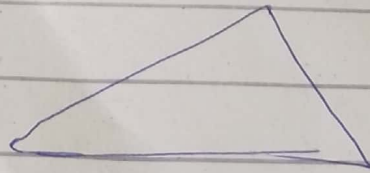
Total Slice = 8

Slice contain Raisin = 3

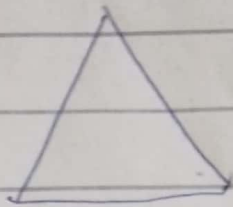
Probability =  $\frac{3}{8}$



(c) (i) Scalence Triangle: A triangle which have all sides and angle different



(ii) Equilateral: A triangle which have all sides and angle equal is called equilateral triangle



(iii) Right and isosceles triangle:  
 isosceles triangle that have two side same we can not draw the angle of  $90^\circ$  on both side. Because sum of three angles is 180 in triangle.

(b) Brothers  $\rightarrow$  Q D G S N Q A  
 Sisters  $\rightarrow$  I X R S Q A

a (b) c (d) e f (g) h  
 i j k l m n (o) p  
 (q) - (r) s t u v w x  
 y z

7 (a)

increase per. 20%

increase =  $\frac{20}{100} \times 80 = 16$

Original Price = ~~Original~~ price - increase =  $80 - 16 = 74$