

Integrated Science Set 1 Herds examination series marking guide.

- 1 Rusting is the interaction of air and water to form rust.
- 2 - Exotic chicken take less time to grow
- Exotic chicken yield more profits than local breeds
- 3 - Light intensity
- Amount of water available
- Carbon dioxide concentration
+ Contagious diseases are ones that spread very fast.
- 5 - medium of transport
- helps to maintain constant body temperature through sweating
- promotes enzyme activities
- Helps in maintaining structural integrity of body cells
- 6 Soil erosion is the washing away of top soil by agents: wind, water, animals
- 7 Digestive system.
Rejerd stomach walls.

8 Mechanical advantage = $\frac{\text{Load (L)}}{\text{Effort (E)}}$
(MA)

$$\frac{0.5}{1} = \frac{10}{x}$$

$$0.5x = 10$$

$$2 \times 5x = 10 \times 2$$

$$= 20$$

$$x = 20N$$

- 9 Identification of sex of a bird
- 10 Kindling is the process of giving birth of a new baby of a rabbit
- 11 $^{\circ}C = [^{\circ}F - 32] \times \frac{5}{9}$
 $^{\circ}C = [97 - 32] \times \frac{5}{9}$
 $^{\circ}C = 65 \times \frac{5}{9}$
 $^{\circ}C = 36\frac{1}{9}^{\circ}C$
 $\therefore 97^{\circ}C = 36\frac{1}{9}^{\circ}C$
- 12 Cassava frog skin disease
Cassava mosaic disease
- 13 Oxygen is needed for burning
Oxygen occupies space
- 14 Because the space occupied by oxygen was used up
- 15 Angiosperms
- 16 oxygen
- 17 Ribcage / thoracic cage
- vertebra
- ossicles
- 18 chemical energy

19. Black clothes have a high absorption rate of heat energy leading to overheating

20.



21. A block and tackle system is a system of two or more pulleys with a rope or cable threaded between them, usually to lift heavy loads.

22. Acne, Eczema, Moles, Psoriasis

23. Acne → using an oil-free moisturizer

Eczema → moisturising daily

Moles → Avoid direct exposure to sunlight

Psoriasis → keeping skin moist

24. Density of a medium

25. Pitch is the softness or loudness of sound energy.

26. Interdependence is a phenomenon where different categories of plants benefit from each other for example legumes fix nitrogen in the soil for other non legumes to absorb.

27. Lack of health education
poverty
high population density.

28. Blue + yellow = Green

29. Bleaching weakens the skin by removing some upper/lower skin layers.

30. Magnetism is a force exerted by magnets when they attract or repel each other.
A magnet is a material or object that produces magnetic field.

31. The loss of energy during transmission is very less in AC as compared to DC.

32. Clay soil is sticky
clay soil does not break easily.

33. Sun is the primary source of energy for all plants during the process of photosynthesis of which almost all organisms depend on plants

34. Deep in the sea has very low light intensity leading to low photosynthesis rate for aquatic plants, that leads to low oxygen concentration.

35. Plants make their own food while animals depend on animals.

36. Sexual reproduction

37. Toxins are harmful chemicals

38. The skin is the largest organ of the human body

39. A young person who has committed a criminal offence.

40. Cannabis
Cocaine
Tobacco

Rej wrong spelling

SECTION B

41. a-melting

b-deposition

Substance X - Water Vapour / Steam

Rej - gas

b) Physical change

42 a) Seed dispersal is the spreading of seeds away from a parent plant

i) pollination is the transfer of pollen from anther heads to the stigma

ii) transpiration is the falling off condensed water vapour from the leaves of plants

b) plant distribution is never uniform because of the following

✓ variation in soil fertility

✓ pests and diseases

✓ variation in species of plants

43 a) is the immediate help given to someone who has got an accident

b) Razor blades
Scissors
Bandages

44 a) Primary Health Care

i) Sensitization of the public about outbreak of diseases

- Educating the public

- Ensuring proper sanitation

46 a) Digestion is the process by which food substances are broken down into simpler particles that can be absorbed into the bloodstream.

b) To increase the surface area for chemical digestion by enzymes.

c) pepsin, renin

47. Excretion is the process by which waste products are removed from the body.

a) To reduce or the accumulation of waste products that could be harmful to our body.

b) Excess water
Wastes such as ammonia

Veins	Arteries
Have thin walls Lumen is wide	Have thick walls Lumen is narrow

Reject one sided answers

a) Thick wall is to withstand high pressure of blood
and lumen to increase blood pressure

48 a) - fish bones to introduce calcium in the body
- crushed egg shells

b) - Feeding protein containing feeds such as crushed fish
- Timely vaccination to prevent spread of diseases

50 a)

b) - Increase soil aeration
- Used as bait during fishing
- Can be sold for money

51 a) Pollution is the addition of extra substances in the environment.

a) Treating wastes before disposal
- Educating the general public
- Reduction on plastic use
- Stop using plastic bottles or bags
- Use of biodegradable materials
- Avoiding the use of toxic substances

52 a) Ventilation of air and water circulation

b) Water is cool dry place.

- ~~It is a dry place~~
- It is a dry place

- Because water is a better medium that reduces the rate of evaporation.

50 a) Groups of worms

- Platyhelminthes (flatworms)
- Annelida (segmented worms)
- Nematoda (roundworms)
- Echiura (spoonworms)
- Chaetognatha (arrow worms)
- Acanthocephala (spiny-headed worms)

53 a) Ventilation is the exchange of indoor and outdoor air.

b) proper ventilation reduces accumulation of gases that may be toxic to life.

c) Asphyxiation

d) putting of porous windows

54 1) collect 8 level teaspoons of sugar

2. collect 1 level teaspoon of salt

3. Add the mixture to 1 liter of water

4. Mix thoroughly.

55 a) Fuel is a chemical substance that undergoes burning to produce energy

b) Petroleum fuel

c) combustion

d) Global warming

End.

Needs examination body.