AGRICULTURE 6882/01
Paper 1 October/November 2024

1 hour

Additional Material: Calculator

Candidates answer:

All forty (40) Multiple Choice Questions on the answer sheet provided.

### **READ THESE INSTRUCTIONS FIRST**

The answer sheet provided has your name, centre number and candidate number and must be signed after completing the paper.

This paper consists of **40** multiple choice questions. **Four** possible answers are provided for each question. Choose the **best** answer and shade your choice in the oval under the correct letter in soft pencil **HB** on the separate multiple choice Answer Grid provided.

Read all questions carefully Answer **all** questions.

The number of marks is given in brackets [ ] at the end of each question or part of the question.

**EXAMPLE:** 41. Which of the following is an example of a ruminant animal?

- A chicken
- **B** rabbit
- C sheep
- **D** turkey

41	Α	В	С	D
41				

		2
1	Wh	at is the contribution of agriculture to the family?
	A B C D	food insecurity food security hunger poverty
2		ich of the following might be included in an extension programme as part of agricultural elopment?
	A B C D	education on improved seeds provision of farm subsidies provision of food aid re-evaluation of job descriptions
3	Wh	ich of the following is the best method for the control of tick-borne diseases in livestock?
	A B C D	isolation of livestock mandatory dipping movement control proper feeding
4	Wh	at is a direct result of becoming a child headed family due to HIV/AIDS?
	A B C D	higher farming costs sale of farming land sale of farm output subsidised agricultural inputs
5	Wh	ich legislation promotes sustainable management of natural resources in Eswatini?
	A B C D	crop movement act environment act forest policy water act
6	Wh	at could be the result of an input subsidy on maize farmers' income?
	A B C D	constant income decreased income fluctuating income increased income

**Table 7.1** compares bags of fertiliser used (input) with bags of potatoes produced (output) over several years.

Year	Input (bags of fertiliser)	Output (bags of potatoes)
1	0	18
2	2	27
3	4	30
4	6	31
5	8	26
6	10	17

Which economic principle is illustrated by **Table 7.1**?

Α	law	$\circ f$	de	ma	nc
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- B law of diminishing returns
- **C** law of supply
- **D** risk and uncertainty

8	What term	describes the	value o	of a foregone	alternative ente	erprise?

- A fixed cost
- **B** net worth
- **C** opportunity cost
- **D** variable cost

9	Which term	refers to	grouping	baby vegetable	es according to se	t standards?

- **A** collection
- **B** grading
- **C** packaging
- **D** sorting

10 Which term describes the amount of time a plant is exposed to light?

- **A** photoperiod
- **B** photosynthesis
- **C** phototaxis
- **D** phototropism

# 11 Which of the following is a greenhouse gas?

- **A** hydrogen
- **B** methane
- **C** nitrogen
- **D** oxygen

12	What is the result of using excess herbicides on a farm?		
	A B C D	compaction eutrophication leaching pollution	
13	Whi	ch gases primarily lead to the formation of acid rain?	
	A B C D	carbon dioxide and chlorine carbon dioxide and methane carbon dioxide and sulphur dioxide chlorine and methane	
14	Wha	at practice involves producing crops and livestock on the same farm?	
	A B C D	mixed cropping mixed farming permaculture sustainable agriculture	
15	How	can surface runoff be reduced in a garden plot?	
	A B C D	add inorganic fertiliser grow plants in trays irrigate with watering can use drip irrigation	
16	Wha	at could be the proportion of organic matter in a loam soil?	
	A B C D	3% 10% 25% 45%	
17	Whi	ch process refers to the reaction between water and chemical compounds in rocks?	
	A B C D	carbonation exfoliation hydrolysis oxidation	

- 18 Which soil type is most likely to lose nutrients through leaching?
  - A clay loam
  - **B** sandy clay
  - C sandy loam
  - **D** silty clay
- 19 Which term describes conversion of organic material into an inorganic form in the nitrogen cycle?
  - **A** ammonification
  - **B** denitrification
  - **C** nitrification
  - D nitrogen fixation
- 20 Which nutrient helps activate most enzymes in plants?
  - **A** calcium
  - **B** phosphorus
  - **C** potassium
  - **D** sulphur
- **21** Fig 21.1 shows a method of controlling soil erosion.



Fig 21.1

Which method of controlling soil erosion is shown in Fig 21.1?

- A contour ploughing
- **B** gabions
- **C** terracing
- **D** tie ridging

22	Which part of the stem transports water from the roots to the shoot?			
	A B C D	cambium cortex phloem xylem		
23	Wha	at is a disadvantage of carrying out artificial pollination in an orchard?		
	A B C D	genetic mutation is increased it is very time consuming larger fruit is produced natural disease immunity is decreased		
24	Wha	at could be an advantage of burning during land preparation?		
	A B C D	aeration of the top soil is improved dense vegetation is removed dormant seeds are prompted to grow organic matter is removed from the soil		
25	Whi	ch plant disease is caused by a virus?		
	A B C D	damping-off maize streak potato blight wilt of tomatoes		
26	Whi	ch cultural practice is used to control crop specific weeds over time?		
	A B C D	crop rotation cultivating the soil early planting using herbicides		
27	Wha	at is the end product of microbial fermentation in the digestive system of a ruminant?		
	A B C D	amino acids fatty acids hydrochloric acid volatile fatty acids		

28	\\/h	at is the function of the seminal fluid in a bull's reproductive system?
20		
	A B	it promotes the mating period it provides sperms with nutrients
	C D	it stimulates the penis to erect it stimulates spermatogenesis
29	Wh	ich hormone is responsible for maintaining the uterus during pregnancy?
	A	oestrogen
	B C	progesterone relaxin
	D	testosterone
30	\//b	y would cattle be fed supplements?
30		
	A B	to avoid nutrient shortages to dry off cows
	С	to prevent contagious diseases
	D	to stimulate onset of heat
31	Wh	at is a result of rotational grazing?
	Α	animals have fewer parasites
	B C	low stocking rates are possible risk of soil erosion is increased
	D	selective grazing is encouraged
32	Wh	ich of the following is a succulent roughage?
02		
	A B	fodder foggage
	С	hay
	D	silage

- 33 Which nutrient promotes the formation of red blood cells in livestock?
  - **A** calcium
  - **B** copper
  - **C** iron
  - **D** magnesium

**34** Fig **34.1** shows a farm structure used to control ticks in cattle.



Fig 34.1

What name is given to the structure in Fig 34.1?

- A crush
- **B** dipping tank
- C spray race
- **D** turn-over crate
- **35** What could be a reason for calibrating a sprayer?
  - A as check for leaks in the sprayer
  - **B** to enable thorough mixing of chemical
  - **C** to lubricate the sprayer pump
  - **D** to prevent chemical wastage
- **36** How can a saw be maintained to last longer?
  - A grease the saw blade
  - **B** paint the saw blade
  - C store the saw in a humid place
  - **D** wash the blade after use
- 37 What could be an advantage of roofing animal houses with metal sheets?
  - **A** they are a good insulation material
  - B they are very durable material
  - C they conduct electricity from building
  - **D** they provide a protective layer of rust

**38** Fig **38.1** shows an incomplete wire fence.

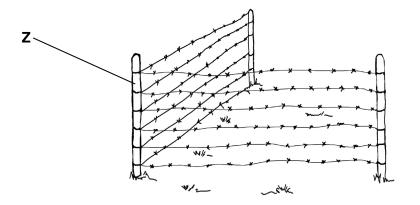


Fig 38.1

Which type of posts could secure the post labelled Z on Fig 38.1?

- **A** droppers
- **B** standards
- **C** strainers
- **D** struts
- 39 Why should the concrete floor in a livestock building have a rough surface?
  - A to improve drainage
  - **B** to increase durability
  - **C** to make cleaning easier
  - D to prevent animals slipping
- **40** Which technological advance prevents wastage of water in irrigation?
  - **A** drones
  - **B** GPS
  - **C** robots
  - **D** timers

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