BIOLOGY FORM 3 PAPER 3
END OF YEAR 2025 EXAM (OCTOBER)
MARKING SCHEME

1. a)

Food substance	Procedure	Observation	Conclusion
Starch	Put 1ml of K add 2 drops of iodine	No observable colour change	Starch absent
Reducing sugar	To 1ml K add equal amount of Benedict solution and boil	No observable colour change / colour of Benedict retained	Reducing sugar absent
Non-reducing sugar	- To 1ml of K add 2 drops of diluted HCL and boil; - Cool and add $NaHCo_3$ until fizzing stops; - Add equal volumes of Benedict solution and boil	Colour changes from blue to green to yellow / brown / orange	Non-reducing sugars present
Protein	To 1ml of K add 1ml of NaOH followed by 2 drops of copper sulphate then shake	Colour changes to purple / violet	Protein present

(9mks)

b) i) Sucrase
ii) Ileum; accept small intestines ***(2mks)***

c) Accept any correct adaptation. ***(1mk)***

2. a) i) B - pancreas***;***
ii) Hormones***;***
Digestive enzymes ***;***
(Accept one specific hormone and digestive enzyme secreted by pancreas).
iii) A - Cardiac splinter muscle***;***
D - Bile duct ***;***
iv) Stores bile ***;***
v) To slow down the movement of food materials. This increases time available for digestion***;***

3. (i) ***Drupe; Fleshy mesocarp and horny endocarp; (ii) Cypsela; Remains of the style;***

(b)

S	***T***
Bigger in size	***Smaller in size;***
Fleshy mesocarp and horn endocarp	***Hard pericarp;***
Green	***Black;***
No persistent calyx	***Persistent calyx with hooks;***

[mark 1st 3]

(c) (i) ***Animals; Fleshy mesocarp/ brightly coloured to attract animals;***

(ii) ***Animals; Hooks to enable it to adhere/ stick onto the skin of passing animal;***