

051106T4APB

APPLIED BIOLOGY LEVEL 6

APB/OS/AB/CR/03/6/A

Perform Taxonomic Studies

Nov/Dec 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

PRACTICAL ASSESSMENT

OBSERVATION CHECKLIST

Candidate's Name			
Candidates CDACC Registration No.			
Assessor's Name & Reg. code			
Assessor's Reg. code			
Unit(s) of Competency			
Venue of Assessment			
Date of assessment			
<i>Indicate the marks available and marks obtained, respectively. Award marks appropriately as guided in the items for evaluation indicated. Give a brief comment where necessary.</i>			
Items to be evaluated:	Marks allocated	Marks obtained	Comments
OBSERVATION CHECKLIST			
i. Wore the mask correctly ii. Wore closed flat shoes iii. Wore gloves correctly iv. Wore lab coat (Award 1 mark for each correct item, 1 mark × 4)	4		
Sub total	4		
Task One: Specimen Y Observation			
i. Demonstrated how to use a microscope a. Plug into power source and switched on (award 1 mark or 0) b. Aligned the eye piece, objective and power source to illuminate the microscope (award 2 mark or 0) c. Mounted specimen Y (award 3 mark or 0) d. Started with low power magnification lens and proceed to medium, then high-power lens according the SOPs	9		

(award 3 mark or 0)			
ii. Identified the specimen Y (Award 1 mark or 0)	1		
iii. Mentioned the kingdom in which specimen Y belongs (Award 1 mark or 1)	1		
iv. Gave correct difference and similarity of specimen Y and Z.	4		
Y (bread mould)	Z (mushroom)		
<i>Ascomycetes</i>	<i>Basidiomycetes</i>		
<i>Non-edible</i>	<i>Edible</i>		
<i>Can cause diseases</i>	<i>Most are not pathogenic</i>		
<i>Cannot grow on soil substitute</i>	<i>Grow on soil substrate</i>		
<i>Small sized</i>	<i>Large sized</i>		
(Award 1 mark or 0 for each difference)			
Sub-Total		15	
Task Two: observed the morphology of specimen X			
i. Observed the specimen X			
a. Placed specimen X on a white tile (Award 1 mark or 0)	1		
b. Made a general observation (Award 1 mark or 0)	1		
c. Used a hand lens to observe the upper part of the specimen (Award 1 mark or 0)	1		
d. Turned the specimen upside down and observed the lower side of the leaf (Award 1 mark or 0)	1		
ii. Recorded 5 observable features of specimen X			

Features: a. <i>Compound leaves/Bi-pinnate</i> b. <i>Deeply serrated margin on the leaves</i> c. <i>Has sori on the lower part of the leaves</i> d. <i>Green colored leaves</i> e. <i>Oppositely arranged leaves</i> f. <i>Leaf stalk</i> (Award 1 mark or 0 for each observable feature) iii. Gave the correct name of the male and female reproductive parts of specimen X <i>Male: antheridia</i> (Award 1 mark or 0) <i>Female: Archegonia</i> (Award 1 mark or 0) iv. Described the sexual reproduction of plant X (Award 2 mark for each correct item, 2x5)	1 1 1 1 1 1 1 1 1		
Sub Total	11		
Task Three: observed the morphology of specimen M and N			
i. Observed the specimen M a. <i>Placed specimen M on a white tile using a pair of forceps (Award 1 mark or 0)</i> b. <i>Made a general observation and noted some features (Award 1 mark or 0)</i> c. <i>Used a hand lens to observe the dorsal part of the specimen (Award 1 mark or 0)</i> d. <i>Turned the specimen on the ventral side and observed using a hand lens (Award 1 mark or 0)</i> e. <i>Observed the head of the specimen and noted features (Award 1 mark or 0)</i>	1 1 1 1 1		

ii.	Observed the specimen N			
a.	<i>Placed specimen N on a white tile using a pair of forceps(Award 1 mark or 0)</i>	1		
b.	<i>Made a general observation and noted some features (Award 1 mark or 0)</i>	1		
c.	<i>Used a hand lens to observe the dorsal part of the specimen (Award 1 mark or 0)</i>	1		
d.	<i>Turned the specimen on the ventral side and observed using a hand lens (Award 1 mark or 0)</i>	1		
e.	<i>Observed the head of the specimen and noted features (Award 1 mark or 0)</i>	1		
iii.	Gave the correct identity of specimen M and N			
	<i>M:Millipede</i>			
	(Award 1 mark or 0)			
	<i>N: Centipede</i>	1		
	(Award 1 mark or 0)	1		
Subtotal		12		
GRAND TOTAL		42		

ASSESSMENT OUTCOMES		
The candidate was found to be: (Please tick (√) as appropriate)		
Competent ☐	Not yet competent ☐	
<i>(The candidate is competent if she/he scores 50% or higher)</i>		
Feedback from candidate:		
Feedback to candidate:		
Candidate's signature:	Date:	
Assessor's signature:	Date:	

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