

GENERAL PATHOLOGY

ISCED UNIT CODE: 0912 541 12A

TVET CDACC UNIT CODE: HE/CU/AHP/CC/14/6/MA

Relationship to Occupational Standards

This unit addresses the unit of competency: Apply knowledge of basic general pathology.

Unit Duration: 50 hours

Unit Description

This unit specifies the competencies required by an animal health and production technologist to apply knowledge of basic general pathology. It involves applying principles of pathology, knowledge of cell injury, inflammation, tissue healing and repair, hemodynamic disorder, cellular adaptation and neoplasia.

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

| S/No | Learning Outcomes | Duration (Hours) |
|--------------|--|------------------|
| 1. | Apply principles of pathology | 5 |
| 2. | Apply knowledge of cell injury | 5 |
| 3. | Apply knowledge of tissue inflammation | 5 |
| 4. | Apply knowledge of tissue healing and repair | 10 |
| 5. | Apply knowledge of hemodynamic disorders | 10 |
| 6. | Apply knowledge of cellular adaptations | 5 |
| 7. | Apply knowledge of neoplasia | 10 |
| Total | | 50 |

Learning Outcomes, Content and Suggested Assessment Methods

| Learning Outcome | Content | Methods of assessment |
|---|---|--|
| 1. Apply principles of pathology | 1.1. Define pathology 1.2. Introduction to principles of pathology 1.3. Branches of pathology 1.3.1. Anatomical 1.3.2. Clinical 1.3.3. Forensic 1.3.4. Histopathology 1.3.5. Surgical 1.3.6. Dermatopathology 1.4. Pathology terms 1.4.1. Etiology 1.4.2. Biopsy 1.4.3. Edema | <ul style="list-style-type: none"> • Written test • Third party report • Oral questioning/ Interviews • Practical |
| 2. Apply knowledge of cell injury | 2.1. Define terminologies 2.1.1. Atrophy 2.1.2. Hypertrophy 2.1.3. Aplasia 2.1.4. Hyperplasia 2.1.5. Metaplasia 2.1.6. Neoplasia 2.2. Causes of cell injury 2.3. Cell injury management. | <ul style="list-style-type: none"> • Written test • Third party report • Oral questioning/ Interviews • Practical |
| 3. Apply knowledge of tissue inflammation | 3.1. Introduction to tissue Inflammation 3.2. Cardinal signs of inflammation 3.3. Types of inflammation | <ul style="list-style-type: none"> • Written tests • Practical • Project • Portfolio of evidence • Third party report • Oral questioning |

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| <p>4. Apply knowledge of tissue healing and repair</p> | <p>4.1. Introduction to tissue healing/repair</p> <p>4.2. Types of wound</p> <p>4.2.1. Open wound</p> <p>4.2.2. Closed wound</p> <p>4.2.3. Contaminated wound</p> <p>4.2.4. Clean wound</p> <p>4.2.5. Surgical wound</p> <p>4.3. Wound healing</p> <p>4.3.1. Wound healing by first intention.</p> <p>4.3.2. Wound healing by second intention</p> <p>4.4. Factors affecting wound healing</p> | <ul style="list-style-type: none"> • Written tests • Practical • Project • Portfolio of evidence • Third party report • Oral questioning |
| <p>5. Apply knowledge of hemodynamic disorders</p> | <p>5.1. Define terminologies</p> <p>5.1.1. Hyperemia</p> <p>5.1.2. Congestion</p> <p>5.1.3. Hemorrhage</p> <p>5.1.4. Thrombosis</p> <p>5.1.5. Oedema</p> <p>5.1.6. Infarction</p> <p>5.1.7. Shock</p> <p>5.2. Management of hemodynamic disorders</p> | <ul style="list-style-type: none"> • Written tests • Practical • Project • Portfolio of evidence • Third party report • Oral questioning |
| <p>6. Apply knowledge of cellular adaptations</p> | <p>6.1. Define cellular adaptation</p> <p>6.2. Types of cellular adaptation</p> <p>6.2.1. Hyperplasia</p> <p>6.2.2. Hypertrophy</p> <p>6.2.3. Atrophy</p> <p>6.2.4. Metaplasia</p> <p>6.3. Causes of cellular</p> | <ul style="list-style-type: none"> • Written tests • Practical • Project • Portfolio of evidence • Third party report • Oral questioning |

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|---------------------------------|---|--|
| | adaptation. | |
| 7. Apply knowledge of neoplasia | 7.1. Define Neoplasia 7.2. Types of Neoplasia 7.2.1. Carcinoma 7.2.2. Sarcoma 7.2.3. Adenoma 7.2.4. Lymphoma 7.3. Causes of neoplasia 7.4. Management of neoplasia | <ul style="list-style-type: none"> • Written tests • Practical • Project • Portfolio of evidence • Third party report • Oral questioning |

Suggested Methods of delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instructions

Recommended Resources for 25 trainees

| S/No. | Category/Item | Description/ Specification | Quantity | Recommended Ratio (Item: Trainee) |
|-------|---------------------------|----------------------------|----------|-----------------------------------|
| | Learning materials | | | |
| 1. | Projector | | 1 | 1:25 |
| 2. | Whiteboard/Smart board | | 1 | 1:25 |
| 3. | Desktop/computer | | 1 | 1:25 |
| 4. | Lecture/Theory room | | 1 | 1:25 |
| 5. | Laboratory | As guided by KVB | 1 | 1:25 |
| 6. | Animal farm | As guided by | 1 | 1:25 |

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|----|-----------|-----|---|------|
| | | KVB | | |
| 7. | Library | | 1 | 1:25 |
| 8. | E-Library | | 1 | 1:25 |