

UNIVERSITY OF PRETORIA / UNIVERSITEIT VAN PRETORIA  
DEPARTMENT OF GEOLOGY / DEPARTEMENT GEOLOGIE

GLY 352 Geodynamics of Ore Formation / GLY 352 Geodinamika van Ertsvorming  
November 2010 Examination / Eksamen

Duration / Tydsduur : 3 hours

Date / Datum : 12.11.2010  
Marks / Punte : 70

INTERNAL EXAMINER/S / INTERNE EKSAMINATOR : Prof. W. Altermann  
EXTERNAL EXAMINER/S / EKSTERNE EKSAMINATOR :

Instructions / Instruksies

Please write CLEARLY and construct precise sentences. Unreadable handwriting will not be marked and sentences that are not to the point and precise, but of doubtful meaning may have a negative influence on your mark. Use sketches where applicable to illustrate your answers. Good luck!

Skryf asb. DUIDELIK en konstrueer presiese sinne. Onleesbare handskrif sal nie gemerk word nie en sinne wat nie n duidelike punt maak nie, maar n twyfelagtige betekenis het sal moontlik n negatiewe invloed op u punt hê. Gebruik sketse waar van toepassing om u antwoorde te illustreer. Sterkte!

Questions:

**Question 1: (20 marks)**

What are MVT deposits, what are their geological and physical/genetic conditions and where are they located in South Africa?

Wat is MVT afsettings, wat is hulle geologiese en fisiese vormingstoestande, en waar word hulle in Suid-Afrika gevind?

**Question 2: (20 marks)**

Please explain in 3-4 sentences the following terms and describe their physical and chemical conditions, where applicable:

X Greisenitization:

Hematitisation:

Silicification: carbonat to silicate

X Argillic alteration:

Verduidelik asseblief, in net 3-4 sinne, die volgende terme en beskryf hulle fisiese en chemiese toestande, waar van toepassing:

Greisenisering: S.W. S - greisen type T.W.

Hematitisering:

Silisifisering: Kaolin ite

Argillise verandering: decomposition of feldspar

**Question 3: (10 marks)**

What is the difference between "ore reserves" and "mineral deposits"?

Wat is die verskil tussen "ertsreserwes" en "mineraalafsettings"?