

PATENT EXAMINATION BOARD

PATENT ATTORNEYS' PRACTICE - GROUP 2(g)

July 2026

Examiner: R. van Niekerk

Moderator: J. Luterek

Time: 4 hours

Total marks: 100

This paper consists of 7 pages (including this cover page)

Instructions:

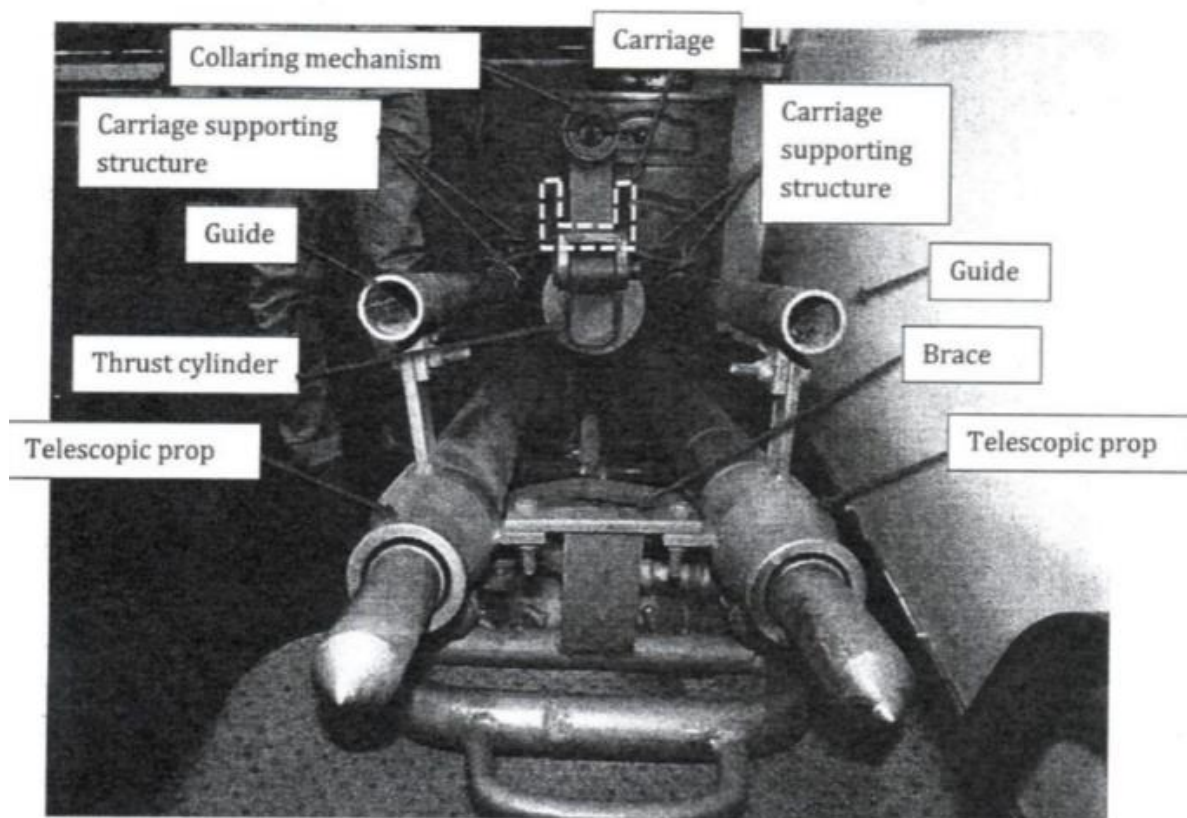
- Answer all questions.
- Write legibly and succinctly. Bullet points are acceptable; you do not need to write everything in full sentences.
- Marks are awarded for correctly identifying and explaining the relevant legal principles and applying them to the facts. Cite relevant case law where appropriate.
- Unless the question states otherwise, assume that all patents/applications referred to are South African patents/applications and that all activities occur within South Africa.

Question 1 (15 marks)

- a) Explain the basic quid pro quo theory of the patent system. (2)
- b) Is there a presumption that a granted patent is valid? Who bears the onus when validity is attacked? (2)
- c) What is the term of a patent under the Patents Act and what must be done to keep it in force? (2)
- d) What is the purpose of the claims of a patent and what requirements apply specifically to the claims? (4)
- e) What matter forms part of the state of the art for novelty purposes but is not considered when assessing inventive step? (3)
- f) What is the Gillette defence? (2)

Question 2 (10 marks)

Your client makes and sells a self-supporting drill rig, shown below, that is used in underground mines to drill holes in the hanging wall of a mine for the purposes of placing roof-bolts or other securing attachments to the wall. The drill rig includes two extendable telescopic props onto which are mounted a drill carriage. The props support the surface of the wall during drilling, thus reducing the risk of the hanging wall collapsing onto the user of the drill rig.



Your client brings to your attention that a third party has a South African patent for a drill rig. Claim 1 of the patent reads:

1. A portable self-supporting drill rig comprising a pair of spaced apart telescopic props with a carriage between them, the carriage movable along an axis substantially parallel to those of the props and supporting a drill mounted on the carriage.

Your client points out that their carriage is not located between the spaced apart telescopic props but, as is clear from the picture above, their carriage is offset from the linear space between the telescopic props.

Assuming that the patent is valid, explain what you need to consider in determining whether there is patent infringement or not and advise your client accordingly.

Question 3 (12 marks)

A research institute consults you about work done on an indigenous plant, the Cape Snowbrush. Local communities have for generations chewed the leaves of the plant to relieve headaches. The researchers isolate a molecule, ZM-14, from the plant and find that a pharmaceutical formulation containing ZM-14 is effective for treating migraine. Comment on the patentability or validity of the following proposed claims and any procedural issue raised by the facts.

- a) Cape Snowbrush leaves for use in a method of relieving headaches, the method comprising chewing the leaves. (2)
- b) A pharmaceutical formulation comprising ZM-14 and a pharmaceutically acceptable carrier for treating migraine. (3)
- c) A method of treating migraine in a patient comprising administering a therapeutically effective amount of ZM-14 to the patient. (2)
- d) ZM-14 for use in a method of treating migraine. (2)
- e) The use of ZM-14 in the manufacture of a medicament for treating migraine. (2)
- f) What must be done before acceptance if the invention is based on or derived from an indigenous biological resource, genetic resource, traditional knowledge or traditional use? (1)

Question 4 (12 marks)

Your client has a patent for a water bottle. Claim 1 reads: "A water bottle comprising a container, a UV light source, a rechargeable battery, and a cap sensor arranged to activate the UV light source only when the cap is closed."

Before the priority date, document A disclosed a water bottle with a UV light source and a rechargeable battery, but with a manual switch. Document B disclosed a cap sensor used on a chemical container to indicate whether the cap is open or closed. You also discover that, before the priority date, a competitor secretly and on a commercial scale used a bottle in China having all the integers of claim 1.

- a) Can documents A and B be mosaicked to form a novelty-destroying anticipation? (2)

- b) Is claim 1 novel over document A or document B considered separately? (3)
- c) How would obviousness be assessed on these facts? Refer to case law. (4)
- d) What is the effect of the secret commercial use in China? (3)

Question 5 (10 marks)

A patent application for a drone navigation system was filed on 1 June 2025, claiming priority from a South African provisional application filed on 1 June 2024. The application discloses a stabilisation system and a separate obstacle-avoidance camera system. Before acceptance, the client asks whether the camera system should be protected in a divisional application. The client also asks whether a later non-inventive improvement to the stabilisation system could be protected by a patent of addition.

- a) When may a divisional application be filed and to what date may it be ante-dated on these facts? (3)
- b) How must the claims of the divisional application differ from those of the parent application? (3)
- c) When is a patent of addition appropriate and what are its main advantages and disadvantages? (4)

Question 6 (10 marks)

Irritech (Pty) Ltd employs Naledi as an engineer to develop irrigation controllers. Her job description includes designing valve-control hardware and firmware. During working hours, using Irritech equipment, Naledi develops a new soil-moisture-responsive valve controller. After resigning, she files a patent application for the invention in her own name. Irritech asks you what it can do.

- a) Who is likely entitled to the invention on these facts? (4)
- b) What proceedings or grounds may be available to Irritech if the application is still pending or if a patent has already been granted? (4)
- c) Would your answer be the same if Naledi had been employed as an accounts clerk and created the controller at home without using Irritech resources, but her employment

agreement makes it clear that any IP that relates to irrigation systems belongs to Irritech (Pty) Ltd? (2)

Question 7 (12 marks)

Your client, SolarSip (Pty) Ltd, developed a self-heating travel mug. A South African provisional patent application was filed on 2 May 2025. On 20 April 2026 the client instructs you to file a complete patent application. The complete specification will include both the originally disclosed heating element and a new safety cut-off feature developed in February 2026. Later, after the complete application has been filed but before it is granted, SolarSip develops a further improvement to the thermostat.

- a) What priority date(s) can the complete application enjoy for the original heating element and for the February 2026 safety cut-off feature? (3)
- b) Assume the complete application has not yet been accepted. What can be done to protect the later thermostat improvement in the same South African application? (3)
- c) Assume instead that SolarSip wants to file a second complete South African application claiming priority from the first complete application, and the first complete application itself claims priority from the provisional application. Can this be done? (3)
- d) SolarSip also wants to pursue protection overseas by way of a PCT application. Briefly describe the two broad phases of the PCT procedure and the possible roles of the South African Patent Office in relation to PCT applications. (3)

Question 8 (10 marks)

Your client wants to stop an alleged infringer urgently. The patent is in force. The alleged infringer denies infringement and says that the patent is invalid. You are asked to advise on procedure and evidence.

- a) Explain the difference between application proceedings and action proceedings, and when each is generally appropriate in patent matters. (4)
- b) What must be established for an interim interdict? (4)

- c) What is the role of an expert witness in relation to claim construction and obviousness? (2)

Question 9 (9 marks)

Your client's granted patent claims include the limitation of "a fastener made from metal or plastics". A competitor finds prior art disclosing a plastic fastener embodiment. Your client wants to amend the claim after publication of acceptance to "a fastener made from spring steel". The complete specification as filed discloses metal fasteners generally and one embodiment made from spring steel. The client also wants to add a new locking feature that appears only in the inventor's laboratory notebook and not in the specification. Finally, the specification contains a typing error: the drawing label says, "50 cm" but all examples and drawings make clear that it should be "5.0 cm".

- a) May the claim be narrowed to spring steel after publication of acceptance? (3)
- b) May the new locking feature from the laboratory notebook be added? (2)
- c) How should the "50 cm" / "5.0 cm" error be dealt with? (2)
- d) What factors may be raised by an opponent to an amendment application? (2)