

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

DESIGN P1

(THEORY)

NOVEMBER 2024

MARKING GUIDELINES

MARKS: 100

These marking guidelines consist of 20 pages.

NSC – Marking Guidelines

SECTION A: DESIGN LITERACY

QUESTION 1: 'UNSEEN' EXAMPLES [10 marks]

Candidates answer EITHER QUESTION 1.1 OR QUESTION 1.2.

1. (Allocate a maximum of 2 marks for each bullet/aspect.)



1.1.1 In the background of the textile design there is variety of floating, flat, organic, biomorphic **shapes** that remind one of the shapes created by a lava lamp. In front of these are interconnected shield-like or leaf-like shapes that form a vertical, chain-like, repetitive pattern creating a striking textile design. ✓

There are a variety of **colours** in the textile which are bold, bright and eye-catching. ☐ The warm, pure magenta dominates the design giving it a joyful, feminine or retro quality. ☐ Cool blues, green and purple contrast with the warm magenta pink creating an exciting and vibrant design. ☐ The inclusion of the neutral colours, white and black, adds contrast and emphasis to the design. ☐

The design reflects strong white cloisonnistic outlines. ☐ These white outlines separate the shapes in the foreground from the flat background and create a strong eye-catching contrast. ☐ The white contour lines create a vertically flowing, curvilinear movement. ☐ Inside the leaf-like shapes, spiky lines move horizontally and vertically, adding a decorative quality to the design. ☐

A dynamic **rhythm** is created by the repetition of the vibrant pink, blue and green colours. The repeated spiky lines in the foreground create an optical movement and a dynamic rhythm. The repetition of the organic pattern in the background and the foreground also adds to the rhythmic quality of the design.

1.1.2 The stylised shield-like shapes remind one of African tribal shields. ☐ The thin, black repeated lines in the larger, shield-like shapes, remind us of animal horns or tusks. The sharp, thin, long thorns of African thorn trees and the rounded organic shape reminds one of pebbles. ☐ The thin, horizontal, spiky line patterns in the smaller, simplified, flat, shield-like shapes can also allude to African tribal body paint decoration and scarification. ☐

Credit any other valid statements.

Q1.1 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (10)
Lower order	Remember, Recall, Recognise	30%	1.1.1	2
	Understand, Explain, Describe			1
Middle order	Apply, Implement, Organise	40%	1.1.1	4
Higher order	Analyse, Compare, Interpret		1.1.2	2
	Evaluate, Reflect	30%	1.1,1	1
	Synthesise, Justify			

1.2 (Allocate a maximum of 2 marks for each bullet/aspect.)



1.2.1 **Movement** is created through the flexible, wavelike/twisted woven basket attached to the raku fired ceramic vessel through a unique juxtapositioning of materials. ☑ The extended repeated vertical lines of the vessel create a soft flowing movement. ☑ The cracks caused by the raku glaze technique create a dynamic, undulating (wave-like) movement. ☑

One of the most recognisable features of raku fired ceramics is the crackle glaze. The rapid cooling of the glazed pieces creates a network of fine cracks in the glaze, giving the surface a smooth but visually **textured** appearance. The woven basketry section of the vessel clearly shows a rough tactile texture. White dots also add to the tactile feel that contrast with the glazed smooth feel of the raku fired pot.

The traditional **form** of the clay pot has been altered; it is split and extended by the addition of basket weaving from the rim of the ceramic base. ☑ The form becomes trumpet and flower-like, with the basketry fanning outwards at the top. ☑ The form is vertically split to create a focal point. This split form reveals a glowing orange interior colour created by the raku glaze. ☑

The vessel is **eclectic in nature** because it borrows from a variety of Eastern and African styles and cultures to create a new innovative design. ☑ The basketry is possibly inspired by African basketry and the raku glaze is found in Japan, an Eastern culture. ☑ The raised white dots found on the clay pot reference African tribal face painting and body scarification. ☑

1.2.2 This vessel is not **functional** as it is cut open and will not be able to hold liquids. ☑ The purpose of this vessel is **decorative** as it makes a strong aesthetic statement and can be used to beautify an interior. ☑ Both the raku and basket weaving techniques are used as expressive media rather than to create a utilitarian object. ☑ Alternatively, the vessel could be considered to be functional as it could hold an arrangement of dried flowers and twigs. ☑

Credit any other valid statements.

Q1.2 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (10)
Lower order	Remember, Recall, Recognise	30%	1.2.1	2
	Understand, Explain, Describe			1
Middle order	Apply, Implement, Organise	40%	1.2.1	4
Higher order	Analyse, Compare, Interpret		1.2.2	2
	Evaluate, Reflect	30%	1.2.1	1
	Synthesise, Justify			

NSC – Marking Guidelines

QUESTION 2: COMMUNICATION THROUGH DESIGN [10 marks]

2.1 (Allocate 4 marks.)



The message of the poster is that gender stereotyping is dangerous and imposed on young, impressionable children. The **images** of the small children holding teddy bears, appear vulnerable against the large, looming, evil and ominous looking black image of a figure which is behind the two little children. The **text** contained in the hands refers to gender stereotypes of boys (e.g. tough, manly) and girls (e.g. kind, ladylike); it describes what characteristics are expected from them. The text is contained in shapes that create the image of large, overpowering, claw like nails reaching in a threatening fashion towards the small images of the children. The words drawn in the hand on the right shows words like tough, manly, forceful, aggressive, etc. and reinforces the character expectation of males, whereas the words used for the female hand, i.e. ladylike, dumb, crazy, simple, etc. reinforce the stereotypical character of females. The white sans serif text at the bottom of the poster contrasts with the black landscape and draws your attention to the two small white images of the children.

2.2 (Allocate 6 marks. A maximum of 2 marks for each bullet/aspect.)



The form in FIGURE D is **influenced** by a traditional amaZulu hat (IsiCholo) worn by a women to indicate that she is married. ☐ The hairstyle in FIGURE E is influenced by the 1960s urban western Pop culture and is a fashion statement making the wearer glamorous and stylish in appearance. ☐

The **form** of the hairstyle in FIGURE D looks like a tall, wide funnel with a flat top and is static. ☑ It is a strong, geometric, cylindrical form giving the married woman a majestic quality. ☑ The form of the beehive hairstyle in FIGURE E is also tall, organic, voluminous and imposing, but it is softer and more organic/voluminous than FIGURE D. ☑

The tactile **texture** of the hairstyle in FIGURE D is coarse and stiff and embellished with a border of smooth, shiny beads. ☑ The variety of textures creates an interesting, decorative hairstyle design. ☑ The convoluted hairstyle in FIGURE E has a smooth and silky texture, and hairspray has been used to set the rigid beehive form. ☑

NOTE: A maximum of ONLY 2 marks may be allocated for tabular comparison responses. A maximum of 4 marks may be allocated where candidates present two separate comparisons that show substantial and relevant statements. Use the cognitive levels as a guideline for your marking.

Credit any other valid statements.

Design/P1

Q2 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (10)
Lower order	Remember, Recall, Recognise	30%	2.1	2
	Understand, Explain, Describe		2.1	1
Middle order	Apply, Implement, Organise	40%	2.1 2.2	1 2
Higher order	Analyse, Compare, Interpret		2.2	2
	Evaluate, Reflect	30%	2.2	2
	Synthesise, Justify			

QUESTION 3 [10 marks]

NOTE: Only two examples (3.1 and 3.3) will be discussed for these marking guidelines.





3.1 (Allocate a maximum of 2 marks per bullet/aspect for a total of 10 marks.)

The Panathenaic Stadium of Athens was inspired by the patron goddess Athena, and the need to host the various performances and competitions/combats of the Panathenaic festival which were held every four years. ☑ In contrast, the new Marques de Riscal hotel was **influenced** by the twisted forms of grape vine tendrils and branches. ☑ The pink, gold and silver coloured canopies are inspired by the colours of wine and the fragmented, chaotic character of the Deconstructivist movement. ☑ It is **influenced** by Gehry's previous Guggenheim art gallery in Bilbao, Spain, which served as a catalyst to place Bilbao on the cultural map of Europe. Similarly, the Marqués de Riscal hotel and winery complex also opens up new possibilities for the future of the small town of Elciego. ☑

The ancient Panathenaic Stadium is built from a locally available, natural marble-coloured stone called poros which is a lightweight, soft limestone that was widely used in construction and statues of Ancient Greece. ☑ Tiers of stone benches were arranged around the track. ☑ In contrast, the Marques de Riscal makes use of modern high-tech **materials** in the construction process. Reinforced concrete, which is clad in sandstone, is used for the main parts of the building. ☑ The bulk of the building consists of many different sweeping, steel canopies anchored by steel columns. The canopies are lined with titanium and colours of gold, pink and a polished mirror finish. ☑

The Panathenaic Stadium does not show any organic forms but is created around the sunken rounded rectangular form of the athletic track with surrounding tiered seats constructed into the sloping sides of the ravine.

The undulating **forms** of the canopies of the Marques de Riscal hotel create an explosion of colour and a sense of movement, and the vertically receding floor plan gives the overall form of the building a pyramid-like appearance.

The undulating organic forms are interrupted with rectilinear ones clad in natural blonde sandstone which create a relationship with the surrounding buildings of the area.

The Panathenaic Stadium is **situated** in a ravine and was built to honour the patron goddess of Athens, the cultural centre of Greece. It was possibly built over a pre-existing sport facility and upgraded with stone seating for the 'privileged few' whereas previously spectators would have sat on the natural slopes on the side of the stadium. The Marques de Riscal is situated on the site of a long-standing wine farm in the Riojas area which is famous for its wine production. The height of the avant- garde building does not surpass that of the church bell tower in the small city of Elciego so as to preserve the identity of this small agricultural population of the La Rioja region.

The Panathenaic Stadium was built specifically to host the Panathenaea Games, mainly used for athletic competitions but its running track was also a place where, during cult festivals, wild animals were slaughtered and gladiator's fought. ☑ The Marques de Riscal winery complex **functions** as a space for the production of wine as well as a space for leisure and has become a tourism site of note within the important historical wine producing area of Rioja. ☑ The complex produces and cares for studies involved in the process of wine making as well as providing a venue for wine tasting. The hotel contains a restaurant, exclusive suites, meeting/conference rooms and a specialised shop that sells products related to the winery. ☑

OR

3.2 The candidate is required to write an essay by comparing any a Classical building/structure with a contemporary building that they have studied by referring to the given bullets. Allocate 2 marks per bullet. Credit any valid statements.

OR

3.3 A CLASSICAL OR CLASSICALLY INSPIRED BUILDING/STRUCTURE COMPARED WITH AN INDIGENOUS KNOWLEDGE SYSTEMS (IKS) BUILDING/STRUCTURE

The Pantheon is compared with the iSwati beehive hut:

The **influences** of Classical Greek architecture is evident in the exterior of the Pantheon which borrows much from the exterior of the Parthenon in Athens. ☑ This influence can be seen in the Pantheon's use of a pediment and the Corinthian capitals used on the columns of the porch; however, the domed main building is more Roman in style. ☑ The iSwati hut functions as a manifestation of the eSwatini identity and is inspired by the need for protection and their traditions in their cultural beliefs ☑ as well as the natural materials that were readily available in their environment. ☑

The **material** used to construct the circular building of the Pantheon is brick and concrete; the exterior was originally clad with marble stucco to match the porch. These heavy, strong, and grand materials successfully communicated the importance of the Roman emperor and empire. The iSwati hut is constructed entirely from natural materials which are specifically selected according to their building properties. The sustainable building method and materials makes use of dried thatching grass which is harvested from the immediate environment and a sapling framework bound with twine.

Both the Pantheon and the iSwati hut are **constructed** on a circular base and make use of the dome as a dominant form. The iSwati hut is constructed with a central sapling trunk which acts as the main support. Once the framework has been constructed, it is thatched with grass to form a beehive. The materials and construction technology make the hut stable, warm in winter and cool in summer. The dome of the Pantheon is constructed using an innovative, new construction technique which allowed for the dimensions of the interior height and the diameter of the dome to be the same. The span of the dome remains the largest unreinforced dome ever constructed and is proof of the Roman engineering expertise.

The weight of the dome is reduced by five rings of 28 coffers which reduce in size as they rise towards the oculus. The oculus at the dome's apex and the entry door are the only natural sources of light in the interior. Throughout the day, light from the oculus moves around this space in a reverse sundial effect: marking time with light rather than shadow. The oculus also offers cooling and ventilation; during storms, a drainage system below the floor handles rain falling through the oculus.

The iSwati beehive hut is one of the few cultures that create **decorative** patterns in the thatching grass; bound tufts and twine patterns are created to frame the low entrance. Similarly the Pantheon is decorated on the exterior of the building by sixteen monolithic columns on the porch. The columns and decorative capitals are made with Egyptian granite, and the bases are carved from white Greek marble. The interior walls and floor are decorated in marble and gilt and the exterior of the Pantheon was originally decorated with marble stucco.

The structure of the Classical building, the Pantheon, reflects its **function**. The name, structure of the porch and pediment decoration suggest the original function of the building was a temple. It was designed as a place from where the emperor could make public appearances and housed statues of the many gods of the Roman pantheistic society. When viewing the iSwati beehive hut, the structure also reveals its function: the thick thatching grass provides protection from the harsh climate and the low entrance provided protection from enemies as they would have to stoop in a vulnerable position to gain entrance to the hut.

Credit must be given to any other valid statements or a comparison of a Classical or Classically inspired building/structure with any contemporary building or a comparison of a Classical or Classically inspired building/structure with any Indigenous Knowledge Systems (IKS) building/structure that the candidate has studied.

NOTE: A maximum of ONLY 3 marks may be allocated for tabular comparison responses. A maximum of 7 marks may be allocated where candidates present two separate essays that show substantial and relevant statements. Use cognitive levels as a guideline for your marking.

Q3. LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (10)
Lower order	Remember, Recall, Recognise	30%	3.1, 3.2, 3.3	1
	Understand, Explain, Describe			2
Middle order	Apply, Implement, Organise	40%	3.1, 3.2, 3.3	4
Higher order	Analyse, Compare, Interpret			1
	Evaluate, Reflect	30%	3.1, 3.2, 3.3	2
	Synthesise, Justify			

TOTAL SECTION A:

30

SECTION B: DESIGN HISTORY

QUESTION 4 [30 marks]

4.1 Allocate 20 marks in total.

Allocate 10 marks for each movement: 5 marks in total for aims, influences and characteristics; 2 marks for a discussion of the design example, 1 mark for the name of a designer and design and 2 marks for reference to the statement in the context of the design movement. The answer must be written in full sentences, with each fact substantiated listing must be avoided.

NOTE: ONLY ONE mark can be allocated for the name of a designer and design of each movement. Use the cognitive levels as guidelines.

These marking guidelines supply an answer for the following two possibilities:

- ARTS AND CRAFTS MOVEMENT
- BAUHAUS

THE ARTS AND CRAFTS MOVEMENT

Relevance of the statement

The Arts and Craft Movement produced good designs because the form was determined by function, e.g. joins were left visible and became part of the exterior design and aesthetics of the product. ☑ The aesthetic value of the products were also important – decoration was used to enhance the basic design. ☑

Discuss the aims, influences and stylistic characteristics

One of the main **aims** of the Arts and Crafts movement was to provide an alternative to the fussy over-decorated mass-produced goods of the 19th century. They aimed to re-establish the value and involvement of the skilled craftsman and designer to improve the quality of the design. The production of quality handmade goods was encouraged as opposed to mass-produced low-quality products. Products had to be simple and function well. Ornamentation was kept to the minimum on furniture, but stylised images from nature ensured the aesthetic appeal of surface designs on textiles, carpets, wall hangings and ceramics.

The Arts and Crafts movement was **influenced** by the organic lines and shapes of leaves, plants and birds resulting in aesthetically pleasing curvilinear surface designs full of movement. The use of unadorned local stone, exposed roof beams and floorboards reflecting the natural grain of wood, influenced by the Rustic English Cottage style's use of natural materials, added to the aesthetically pleasing quality of these designs. The Gothic styles' emphasis on order, function and simplicity was another influence. Their interest in the Medieval Gothic style also led to the use of mythological creatures such as dragons as subject matter and the use of medieval design motifs like the trefoil and the quatrefoil.

Characteristically shapes on surface designs were flat and organic with clear outlines forming controlled curvilinear rhythms. ☐ These surface designs consisted mostly of symmetrically balanced compositions stabilising the movement and conveying an overall sense of order. ☐ Flat areas of rich, bold colours were used in different shades of blue, yellow and red, often reminiscent of Gothic stained glass windows. ☐ These were at times combined with earth tones. ☐

One example of the Arts and Crafts movement is the **Library Table** by Gustave Stickley. ☑



The **Library Table** is both functional and aesthetically pleasing. The table is sturdy and simple, but at the same time decorative due to the hexagonal shaped top, the textured leather covering and the row of studs holding the cover in place. Typical of the Arts and Crafts movement is the use of wood, a natural material, as well as of exposed joins to reflect the hand of the craftsman. Also typical is the fact that the wood has been left unpainted to reveal the natural patterns formed by the grain of the wood.

BAUHAUS

Relevance of the statement

The Bauhaus created good designs that were **functional** and mass-produced, but at the same time **aesthetically** pleasing. ✓ They believed that function should determine form. ✓ All surface decoration was rejected and the beauty of products lay in perfectly balanced, pure, geometric forms, clean lines and smooth textures. ✓

Discuss the aims, influences and stylistic characteristics

The Bauhaus **aimed** to bring design back into contact with everyday life by reuniting aesthetic and functional design. ☐ They wanted to narrow the gap between artist and craftsman by founding the Bauhaus School. ☐

The Bauhaus was **influenced** by the Cubists' striving for essential simplicity through the reduction of forms to simple, geometric shapes. ☑ They were also influenced by the machine-age and believed that their designs should be geometric, with clean edges and smooth surfaces, reflecting this machine aesthetic. ☑

The Bauhaus **characteristically** made use of pure geometric forms like cubes, cones and spheres that conveyed calmness and stability. The outlines of these forms were clear and precise reminiscent of machinery. Materials are modern and mostly machine-produced such as concrete, reinforced concrete, reinforced glass, and steel, giving products and buildings an industrial look. Surfaces are unadorned, smooth and sleek, placing the attention on the structure and function of the design. Extreme simplicity, the use of quality materials and beautifully finished surfaces ensured the aesthetic appeal of these designs.

An **example** of a Bauhaus design that reflects both functionality and aesthetic appeal are the Bauhaus **Nesting Tables** by Joseph Albers. ☑

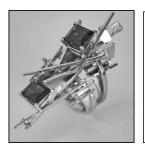


The four tables are **functional** in that they can be fitted into each other to form one unit to save space in an area where space is a concern. Each one of the four tables can be used for a variety of other functions, e.g. as a little desk, to serve tea from, put drinks on, etc. Each table in this set of four tables is a perfect, mechanical-looking, cubelike form, typical of Bauhaus design. Straight, slender wooden lines frame the front and back of the table top and continue downwards to form the legs. The table top forms a solid rectangle and the legs surround a rectangular space. The repetition of rectangles results in a very unified, ordered and balanced design, which are also typical characteristics of Bauhaus designs. The glass tops are lacquered on the underside in shades of minty green, yellow, orange and blue to add a fun aspect to a living-room.

Credit any other valid statements.

Q4.1 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (20)
Lower order	Remember, Recall, Recognise	30%	4.1	2
	Understand, Explain, Describe			4
Middle order	Apply, Implement, Organise	40%	4.1	8
Higher order	Analyse, Compare, Interpret			2
	Evaluate, Reflect	30%	4.1	4
	Synthesise, Justify			

4.2 [10 marks] (Allocate a maximum of 2 marks for each bullet/aspect.)





The ring in FIGURE H reflects the Deconstructivist's **aim** to fragment forms in order to explore parts rather than to create harmony, unity and balance. ☑ In contrast the Art Nouveau ring in FIGURE I aims to repeat the sensual forms and lines of nature to create rhythmic unity. ☑

The Deconstructivist ring is clearly **influenced** by the interest of Cubism in fragmenting objects into geometric lines and shapes, whereas the Art Nouveau ring shows the influence of organic forms of nature such as peacocks. ☑ The Deconstructivist ring is large, cluttered and spiky, showing the influence of the Anti-Design movement's questioning of conventional standards of beauty, whereas the Art Nouveau ring consists of soothing, smooth, swirling surfaces and forms. ☑

The Deconstructivist ring is cut up by many criss-crossing, straight, diagonal **lines**, typical of Deconstructivist designs, resulting in sharp, broken movements. ☑ In comparison the whiplash line created by the flowing, sensuous outline of the peacock head and neck which wrap around the Art Nouveau ring, is more continuous and swirling. ☑

A flowing **rhythm** is created by the repeated, curved peacock heads in FIGURE I that sinuously wrap around the central gemstone. ☑ An outward radiating rhythm is created by the repetition of the fanlike lines and circles on top of the peacock heads. ☑ In contrast, a chaotic rhythm is created by the straight, angular, haphazard placed lines in FIGURE H. ☑

Ergonomics (comfort to the wearer) is clearly not one of the main aims of the Deconstructivist ring as it must be quite heavy on the finger and its protruding lines will hook into many things whilst moving the hand and finger. ☑ The Art Nouveau ring seems lighter and more comfortable to wear. ☑ The peacock crown feathers extend on either side of the centre of the ring along the finger which will make them less likely to hook into things, ☑ the ring is very uncomfortable on the finger. ☑

Credit any other valid statements.

NOTE: A maximum of ONLY 3 marks may be allocated for tabular comparison responses. A maximum of 7 marks may be allocated where candidates present two separate essays that show substantial and relevant statements. Use cognitive levels as a guideline for your marking.

Q4.2 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (10)
Lower order	Remember, Recall,	30%	4.2	2
	Understand, Explain,			1
Middle order	Apply, Implement, Organise	40%	4.2	4
Higher order	Analyse, Compare, Interpret			
	Evaluate, Reflect	30%	4.2	2
	Synthesise, Justify			1

TOTAL SECTION B:

30

SECTION C: DESIGN IN A SOCIOCULTURAL/ENVIRONMENTAL AND SUSTAINABLE CONTEXT

QUESTION 5 [20 marks]

Answer EITHER QUESTION 5.1 OR QUESTION 5.2.

5.1



5.1.1 (Allocate 4 marks.)

A positive feature of the staircase design, is the smooth rise of each step which appears low and comfortable to use. The staircase allows for inclusive access; abled and people with disabilities can use the same staircase simultaneously. A negative feature of the staircase design is that there is a shortage of handrails and this could lead to people falling down. The sharp turns in the ramps could be hazardous for wheelchairs resulting in accidents. The steep incline/decline of the ramp without speed humps could be quite physically challenging and dangerous.

Credit any other valid answers.

5.1.2 (Allocate 16 marks.)

Allocate 16 marks in total, 8 marks per case study: 1 mark for the name of a designer and design, 5 marks for a discussion of the aims, materials and techniques and 2 marks for a discussion of the design example and how it addresses socio-cultural issues.

ONE SOUTH AFRICAN CONTEMPORARY SOCIOCULTURAL DESIGNER/DESIGN GROUP:



Name of the designer/design group and design product

FIRE Station Soweto by Rodney Eksteen in association with Jeanne Homer and Jocelin Flank.☑

Discuss the aims, materials and techniques of this designer

Rodney Eksteen, a 25-year member of the fire service in South Africa, partnered with Associate Professor of Architecture Jeanne Homer and Jocelin Flank of Oklahoma State University, to design a fire station in the Johannesburg area that serves as more than just a fire station. It **aimed** to provide the services and duties of a fire station that not only belonged to the community of Soweto, but also bridged the gap between fire service personnel and citizens. The design aimed to help both sides believe that they are partners in the care and well-being of their

community. ☐ The **materials and techniques** used for this building are unconventional in style, using a steel frame, concrete roof glass and aluminium skin to allow maximum natural light into the building. ☐ Solar panels are used to generate electricity and makes the building energy-saving and sustainable. ☐ A minimal use of heavy traditional brick and mortar is used on the walls. ☐

Analyse ONE example explaining how this design addresses sociocultural issue(s)

In the past, fire stations were built more as warehouses than as parts of communities. They resembled military installations with barred windows and gates and served as storage for fire equipment and personnel. Other than the response of fire stations to emergencies, there was little to no interaction between fire service personnel and citizens. This fire station is open plan and full of light, inviting the public to enter it. It is no longer a structure that represents an authoritarian government — it reaches out to the public and creates a bridge between the government and the public.

ONE INTERNATIONAL DESIGNER/DESIGN GROUP





Name of the designer/design group and their design product
Homeless Studio by the University of Southern California's School of Architecture.

✓

Analyse the aims, materials and techniques of this designer

In response to a growing concern around the issue of homeless people, the University of Southern California's School of Architecture created the **Homeless Studio**, a student project that **aims** to alleviate the crisis of the homeless. Developed in conjunction with Madworkshop (a non-profit organisation and architecture design group), the **Homeless Studio** developed holistic solutions to tackle the issue of homelessness.

Fabricated with **materials** like plywood, Perspex and aluminium, the shelters are meant to be light and easy to move around. The shelter comes in different shape and sizes but allows space for one person to sleep. Each design addresses the need for its occupant's security, privacy, and shelter from the elements. This project allows for the physical creation of their prototypes, which included a 30-bed shelter that will become a prototype shelter for the homeless. The designers delivered their finished structures to homeless people around the city.

Discuss ONE example explaining how this design addresses sociocultural issue(s)

Designers addressed the **social issue** of homelessness by creating this collection of temporary, moveable, modular and expandable structures that can keep the homeless off the street, while refusing reliance on government intervention.

The **Homeless Studio**'s plan allows the group of designers to participate in handson fabrication workshops and undertake real-life case studies with local residents who are experiencing homelessness. ☑

Credit any other valid statements.

Q5.1 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (20)
Lower order	Remember, Recall, Recognise Understand, Explain, Describe	30%	5.1.1 + 5.1.2 5.1.1 + 5.1.2	1 + 1 1 + 3
Middle order	Apply, Implement, Organise	40%	5.1.1 5.1.2	2 6
Higher order	Analyse, Compare, Interpret Evaluate, Reflect Synthesise, Justify	30%	5.1.2 5.1.2	2 4

5.2

5.2.1 (Allocate 2 marks.)

In FIGURE K, the **Bird's Nest** pool gazebo is constructed by making use of indigenous craft techniques such as basket weaving, hut and kraal construction. International and local tourists who visit the lodge are exposed to Botswana's traditional craft heritage that is seen in the gazebo design. The potential of these indigenous craft techniques elevates the status of design as it merges the 'old' (traditional) with the 'new' (modern). This also helps to give tourists a unique, authentic African experience.

5.2.2 (Allocate 8 marks.): 1 mark for the traditional craft/indigenous cultural community, 5 marks for a discussion of the materials, methods and processes and 2 marks for the social value and function of the craft.

Name of ONE traditional craft/indigenous cultural community that produced the traditional craft:

IsiZulu Ceramics. ☑

The materials, methods and processes used to create the traditional craft:

The coiling **technique** is used to make Zulu pots. ✓ The main **materials** are red and dark clay, which is gathered from the mountains and is ground to a fine powder on a grinding stone.

☐ This powder is then dried until it has reached the right consistency or suitable degree of plasticity.

✓ The walls of the vessel are gradually built up from a circular base.
☐ Careful attention is paid to symmetry and correct width of walls. ☐ Inner and outer walls are shaped and burnished with a piece of calabash, stone or metal tool.

☐ Once completed, the pot is covered with blankets and placed in a hut until leather hard and then dried outside for seven days.

✓ There are two main Zulu decoration techniques, i.e. applied and carved decoration.

✓ Applied decoration is done by attaching small clay balls onto pots (Intsumpa) or exerting pressure from inside the pot to create outer protrusions.

✓ Carved decorations inscribed onto the pot create repetitive patterns. ✓ Zulus made use of pit firing. ✓ Pots are placed in a shallow pit and covered with dry aloe leaves and wood, which is then set alight. ✓ Pots intended for eating and drinking undergo a second firing using cakes of dry cow dung.

✓ Pots emerge from the second firing possessing with a black face, which is rubbed with gooseberry leaves, a small flattened stone and animal fat giving them a glossy, slick and black finish.

✓

The social value and function of the craft:

The main **functions** of these pottery vessels were to cook and serve meat, cereals and vegetables. Brew, serve and drink sorghum beer. Transport and store water, administer medicines, burn incense as part of ceremonies aimed at venerating and communicating with the ancestors. Most potters today make vessels for brewing, serving and drinking sorghum beer (utshwala), and a series of smaller serving and eating vessels for consuming uphuto, a maize-based porridge, and amasi. Shapes and sizes vary according to their function – the largest pot is the undecorated 'imbiza', a pot used for cooking and holding up to 40 litres of traditional beer. Drinking pots have an urn-shape with a cylindrical funnel, which prevents spillage and facilitates pouring. The 'umancishane', a smaller pot, indicates to a visitor that has received beer in it, that a short stay only is expected.

Credit any other valid statements.

5.2.3 (Allocate 10 marks): 1 mark for the name of the designer/design group and their product(s), 6 marks for aims, influences and materials and 3 marks on how traditional techniques/methods and materials have been applied to the relevant contemporary design.

Name of design/design group and their product(s):

Vase Telewire Light by Mash T Studio ☑



General aims, influences and characteristics of the designer/design group's work: Mash T Studio's mission centres around preserving the essence of traditional artisanal craftsmanship ☑ by fusing technology and these crafts, to create a contemporary design aesthetic. ☑ They draw from the rich South African cultural heritage to inspire modern design. ☑ This approach allows them to breathe new life into traditional designs, techniques and objects, ensuring their relevance in today's society so that they are not forgotten. ☑ Traditional materials such as beads and telephone wire are used to form these modern, unexpected new forms. ☑

Mash T Studio collaborates closely with traditional craftspeople to weave South African stories into their diverse range of products, ranging from lighting to furniture,
☑ e.g. **The Hlabisa bench**, which was created as a collaboration with Houtlander and master weaver Beauty Ngxongo. ☑

A discussion of how traditional techniques/methods have been applied to the contemporary design:

The Vase Telewire scooby pendant lamp, part of the Alfred light range, is an example of a contemporary design that adapts traditional South African crafts, i.e. basket weaving and telephone wire weaving to create beautiful products that fit into a contemporary design. ☑ The pendant lamp is made up of two basket-like forms that meet in the middle. The top half flares open towards the top resembling a wide basket and the bottom half forms a more tubular-formed downward-facing basket form. ☑ The combination of two basket forms results in a new, unexpected contemporary form. ☑

These light fittings were created in collaboration with master telewire weaver, Bab' Alfred Ntuli and Elizabeth Joubert of Tin Lab Designs. ☐ Inspired by the practice seen as early as the 1960s where Zulu night watchmen started weaving scraps of telephone wire around their traditional sticks, these ceiling lights add a modern twist to an age-old tradition, with a distinctive aesthetic to any interior. ☐

Credit any other valid statements.

NO marks should be given for repetition of designer(s) and their work used in this question paper.

Q5.2 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (20)
Lower order	Remember, Recall,	30%	5.2.1 + 5.2.2	1 + 2
	Understand, Explain,		5.2.3	3
Middle order	Apply, Implement, Organise	40%	5.2.1 + 5.2.2	1 + 3
			+ 5.2.3	+ 4
Higher order	Analyse, Compare, Interpret		5.2.2	3
	Evaluate, Reflect	30%	5.2.3	1
	Synthesise, Justify		5.2.3	2

QUESTION 6 [20 marks]

6.1 (Allocate 4 marks.)



Fashion designer Katekani Moreku believes in the recycling and upcycling of discarded materials for his fashion designs. Katekani is able to transform local, popular items such as maize meal bags, brightly coloured, striped plastic table cloths, natural woven baskets and shweshwe fabric into sustainable fashion. Katekani finds unconventional materials and discarded items at charity stores which he transforms into trendy new fashion designs for the current generation. Katekani emphasises that upcycling discarded clothing and objects is cost-effective. By upcycling, he feels empowered to express his personality and unique signature style in his range which combines textures and brightly coloured fabrics, this makes his sustainable fashion range anything but conventional, uniform or basic. Moreku additionally adds that our current generation must begin to create awareness of the importance of upcycling and recycling so that our future generations will be able to reduce the amount of pollution.

Credit any other valid statements.

6.2 (Allocate 16 marks.)

Allocate 16 marks in total, 8 marks per case study: 1 mark for the name of designer and design, 5 marks for a discussion of the aims, materials and processes and 2 marks for a discussion of the design example and how it addresses environmental concerns.

Name of the designer/design group and ONE of their designs: Waste to Wonder Pavilion by Architecture Studio theMAAK: a transformed public space using upcycled Tetra Pak waste (South Africa), 2019. ☑







Aims, materials and processes used:

The primary **aim** of the architect firm theMAAK is to use a hands-on approach in an attempt to empower and educate the community in Langa (a low-income area in Cape Town) to understand what 'waste' is and how to utilise it to their benefit. Another aim is to encourage a dynamic 'culture for the use of public spaces' in developing communities. The team hopes that the project will create a positive response from the community and world-class architecture will be provided for those that need it most.

The theme was to create a temporary Wonder Pavilion structure. With the help of theMaak the community made a Wonder Pavilion using Tetra-Pak packaging **material** (recycled milk cartons). The inside of the Tetra-Pak packaging is a heavy-duty, tough paper that is water repellent, which makes it durable and suitable for a temporary canopy.

The **process** theMAAK followed, was a collaboration with like-minded people from different backgrounds, and who had different skills from Langa. Ideas were exchanged, shared and creatives were given the opportunity to learn from each other. ☑ Through this collaboration, theMaak helped the community to make quality environmental designs more accessible and inclusive. ☑

An analysis of the design, explaining why it is sustainable and addresses environmental concerns:





The Waste to Wonder Pavilion is a swooping, modular canopy design creating an origami-netting, architectural pattern and/or structure using the inside white part of the milk cartons.

The pavilion clearly shows how Tetra-Pak waste can be used to build a pavilion and make the community aware of the 'aesthetic and material potential of waste'.

The reuse and upcycling of Tetra-Pak creates a sustainable design that addresses environmental concerns.

Through education and shared information, fewer milk cartons end up in landfills or on the streets of Langa and the surrounding areas.

This upcycling initiative provides beautiful public infrastructure, made possible through collaboration and encourages the community to be responsible and mindful of their environment.

INTERNATIONAL ENVIRONMENTAL DESIGNER

Name of the designer/design group and ONE of their designs: Zero Waste Pop-up Restaurant by Linda Bergroth (Manhattan fair), 2018. ☑







Aims, materials and processes:

The temporary, four day **Zero-Waste Pop-up Restaurant**, builds on the concept created by Helsinki's Restaurant, Nolla, and its main **aim** is to create the 'first zero-waste restaurant in Manhattan'. Linda Bergroth designed the pop-up restaurant, based on her Scandinavian background. Its aims are to use foods that would normally be discarded, and to reject non-sustainable packaging. ☑ They worked with designers, engineers and architects to rethink waste management and water efficiency. ☑

The **material** used to build the pop-up restaurant is recycled Tetra Pak – a packaging material commonly used for milk cartons and food packaging.
Chef Luka Balac said, 'our dishes at **Zero Waste Pop-up Restaurant** are made from local and organic ingredients as well as commonly overlooked by-products and all leftovers are composted.
Sustainable food packaging, biodegradable solutions and lately material innovations are considered.
The wall panels of the pop-up restaurant are fabricated in batches by ReWall in lowa, and take their colour from whichever products are **processed** at the time.
Staying true to the materials, the surfaces have a mottled silver-blue tone from afar, while the text and barcodes from the packaging are visible when looked at up close.
The pop-up restaurant and products are designed to create a fun visual experience, an intimate dining experience, and the recycled Tetra-Pak creates an environment with excellent acoustics.

An analysis of the design, explaining why it is sustainable and addresses environmental concerns:

The **Zero Waste Pop-up Restaurant** is an excellent example of a circular economy, in which resources are kept and reused for as long as possible. This differs from a linear economy where materials and products are made, used and then discarded. ☐ The pop-up event also included workshops and talks on the circular economy and zero-waste fashion. ☐ This design urges people to rethink our lifestyle, eating habits and the materials we use. ☐ The philosophy behind this design should be our goal – reduce waste and help to maintain the natural environment for generations to come. We need to be responsible and make the right choices. ☐ The **Zero Waste Pop-up Restaurant** is a truly sustainable design made entirely from recycled and recyclable materials – furnishings and tableware were also 100% recyclable and inspired by sustainable iconic Scandinavian styles. ☑

Credit any other valid statements.

Q6 LEVEL	COGNITIVE SKILLS	WEIGHTINGS	QUESTIONS	MARKS (20)
Lower order	Remember, Recall, Recognise	30%	6.1 + 6.2	2 + 2
	Understand, Explain, Describe		6.2	2
Middle order	Apply, Implement, Organise	40%	6.1	2
			6.2	6
Higher order	Analyse, Compare, Interpret		6	2
	Evaluate, Reflect	30%	•	2
	Synthesise, Justify]	2	2

TOTAL SECTION C: 40
GRAND TOTAL: 100