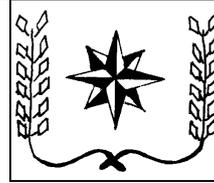
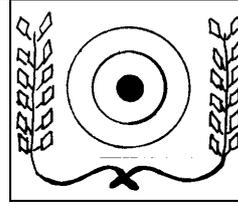


MAPPING
INTEREST BADGE


Date Passed Signed

- | | | |
|---|-------|----------|
| 1. Have passed the Map Reading Scoutcraft Badge, or complete all the requirements for it. Be prepared to be examined on any requirement of the Scoutcraft Badge, with a higher level of skill expected. | _____ | <u>1</u> |
| 2. Explain the relationship between different map scales, the importance of selecting the correct map for the task and of using the latest information available. Explain the system of numbering maps and how to obtain maps. | _____ | <u>2</u> |
| 3. Demonstrate your knowledge of contours by carrying out an exercise set by the examiner to determine intervisibility and the gradient of slopes. Draw a rough profile between two points on a map selected by the examiner. | _____ | <u>3</u> |
| 4. Make a map to scale 1:500, using an improvised plane table, of a fairly open Area of land about 4 hectares (40 000 sq m) in extent specified by the examiner. The Area should be of such complexity that a baseline with at least four legs would be required and approximately 100 sightings (total of sightings from all stations) and approximately 50 other measurements must be taken. In rural Areas, the examiner will specify the amount of detail required to provide a test of equivalent difficulty. Rough maps and field sheets must be produced for inspection by the examiner. | _____ | <u>4</u> |
| 5. Make a strip map to scale 1:2000 of a minimum of a one kilometre section of road specified by the examiner. Show all the main features which are visible for a reasonable distance on each side of the road. Field records must be kept in a systematic manner and field sheets or field books must be produced for inspection. | _____ | <u>5</u> |
| 6. Demonstrate an understanding of lines of latitude and longitude, and the grid reference system based on zero X at the equator and zero Y at a line of longitude used by land surveyors in South Africa (as shown on maps of the 1:50 000 and 1:10 000 series). Determine the grid references for given points on a map, and find the correct points for given grid references. | _____ | <u>6</u> |

MARKSMAN
INTEREST BADGE


Date Passed

Signed

1. Produce two targets fired by yourself within the previous four weeks for any ONE of the following tests, whether concurrently or preferably on different dates, showing that on each occasion you obtained not less than the minimum score indicated. The targets must be certified by your instructors. The edge of the shot-hole nearest to the centre of the target will decide the value of the hit.

Test 1. Small bore rifle (.22): Any single-loading type, any sights except telescopic, position prone, sling may be used. Ten shots at the following range:

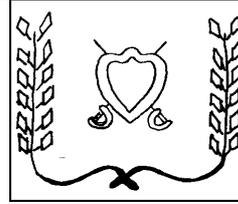
Minimum score: 80 at 25m Target: .22 School target.

Test 2. Air Rifle (4.5mm): Any single-loading type, any sights except telescopic, position standing or prone, sling may be used. Ten shots at following range:

Minimum score: 80 at 10m Target : International Air Rifle

NOTE: When using air rifles, care must be taken to position the targets so that pellets do not rebound to the danger of the marksman's eyes.

- | | |
|---|---|
| <ol style="list-style-type: none"> 2. List the usual safety rules for rifle shooting. Name the parts and explain the functions of the rifle. Demonstrate the care and cleaning of the rifle. 3. Discuss with the examiner the local regulations dealing with the owning, carrying and use of a firearm. 4. In discussion with the examiner, demonstrate that you understand the responsibility of owning a gun, particularly in regard to your own safety and that of others and its care and safe-keeping. 5. Explain how guns are related to wildlife conservation. | <p>_____ <u>1</u></p> <p>_____ <u>2</u></p> <p>_____ <u>3</u></p> <p>_____ <u>4</u></p> <p>_____ <u>5</u></p> |
|---|---|

MASTER-AT-ARMS
INTEREST BADGE


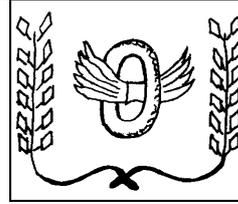
Date Passed

Signed

1. Demonstrate your proficiency in ONE of the following, in which you have trained and participated for at least 6 months:
 - a) singlestick
 - b) quarterstaff
 - c) fencing
 - d) boxing
 - e) wrestling
 - f) a recognised form of self-defence such as Judo or Karate.

NOTE: In all the contest events you must participate in a contest under proper ring conditions.

- | | | |
|--|-------|----------|
| 1. Discuss the correct training techniques, and draw up a training programme for yourself. | _____ | <u>1</u> |
| 2. Be able to name and demonstrate the correct methods of attack and defence. Know the contest rules, how contestants are judged and the means of scoring. | _____ | <u>2</u> |
| 3. Discuss the origin of the art, and its historical development. Discuss the involvement of two masters of the art - one past and one present - and the achievements of each. | _____ | <u>3</u> |
| | _____ | <u>4</u> |

MECHANIC
INTEREST BADGE


Date Passed _____ Signed _____

1. Demonstrate the correct way to use the following tools:

Screwdriver, ball peen hammer, pliers, cold chisel, centre punch, files (flat, round, half-round, square), hacksaw, callipers (inside and outside), rule, scribe, square and feeler gauges.

 _____ 1 _____

2. Demonstrate the correct way to use the following spanners:

Open end, spark plug, box socket, ring, and Allen key.

Know the various types of nuts and bolts and the correct spanner to use on each.

 _____ 2 _____

3. Do one of the following alternatives (A or B):

A a) Demonstrate that you understand the working of the internal combustion engine and know the names and functions of all the principal parts of a motor car engine.

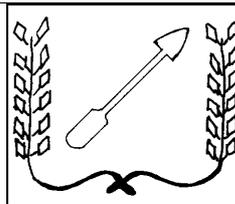
b) Demonstrate how to lubricate a motor car, including gearbox sump and back axle. Top up the battery. Check the order of firing. Clean and test the spark plugs, check and set the contact points, check and set the timing, adjust the fanbelt. Remove the engine head and demonstrate your ability to decarbonise, grind valves and adjust tappets. Replace the engine head correctly and securely.

 _____ A _____

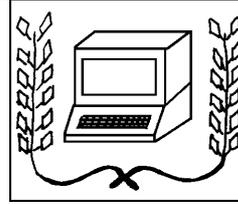
OR

B An equivalent test with agricultural machinery involving its operation, adjustment and maintenance

 _____ B _____

METAL WORKER
INTEREST BADGE


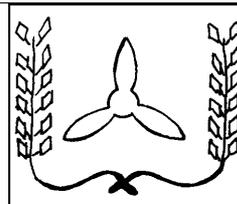
	Date Passed	Signed
1. Show a knowledge of the tools that are necessary in your field of metal work.	_____	1 _____
2. Use tin cans to make two useful things that need cutting, bending and edging.	_____	2 _____
3. Demonstrate your proficiency in brazing, welding, soldering and the use of fluxes.	_____	3 _____
4. Explain and demonstrate the precautions to be taken when using electric grinding and drilling machines.	_____	4 _____
5. Show that you can use the tools correctly by making three useful or decorative articles in metal that will demonstrate your proficiency and imagination.	_____	5 _____


**MICRO COMPUTER
INTEREST BADGE**

Date Passed _____ Signed _____

1. Present evidence of your involvement in using computers over a period of at least three months, and explain what you learnt in that time. _____ 1 _____
2. Show a general knowledge of computer technology, including the basic components of a computer system, and explain the following terms:
hardware, software, operating system, memory, processor, storage devices, modem, scanner, network, internet, backups, copyrights _____ 2 _____
3. Discuss the different storage devices and media (hard drive, CD-ROM, etc.) which are currently available, and what each of them is used for. _____ 3 _____
4. Do THREE of the following:
 - a. Use a word processor to produce two notices to parents, or troop newsletters, including both text and graphics if possible.
 - b. Use a database package to compile a troop list. Show how to print different reports, such as a list of phone numbers for each patrol, a list of birthdays in calendar order, or an address list for the parents committee. Help your Scouter by keeping these lists up-to-date for at least 3 months.
 - c. Use a spreadsheet to compile a food budget for a patrol camp.
 - d. Use a computer to design and print a poster, e.g. an advertisement for a Scout event, including a logo or illustration you designed on the computer.
 - e. Show that you know how to search for information on the internet, and find out what information is available about Scouting in South Africa and in other countries.
 - f. Design a web page for your troop, and keep it up to date over at least three months. Keep note of any feedback you get from people who visit your page.
 - g. Make contact with a Scout in another country or town, and correspond with them by email for at least three months.
 - h. Use a programming language to write and demonstrate a computer programme you have chosen, subject to your examiner's approval.
 - i. Demonstrate your knowledge of computer maintenance by doing some of the following, to the examiner's satisfaction: assembling a computer from parts, installing new hardware, diagnosing and correcting faults, installing and configuring software.

 _____ 4 _____

MODEL AERO ENGINEER
INTEREST BADGE


Date Passed

Signed

1. Build and fly two models. One of these models must be designed by you and the working drawings must be produced. The flying performance of the models built must meet the minimum criteria for the model type as set out below.

 _____ 1 _____

FREE FLIGHT MODELS

The minimum flying times for each type of free flight model are:

- a) Hand-launched glider: 30 seconds flight
- b) Glider with maximum of 50 metres of tow line: 60 seconds flight
- c) Rubber, electric, Carbon Dioxide powered glider: 60 seconds flight
- d) Engine (internal combustion) powered : 90 seconds flight (10 seconds power run)

Scale model: 30 seconds flight

CONTROL LINE MODELS

The model must perform the following manoeuvres:

Scale and stunt take-off; 2 level laps; approximately 2m high climb and dive for two laps; loop; horizontal figure-of-eight; 2 laps inverted; 2 level laps; and landing.

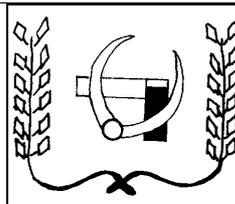
RADIO CONTROLLED MODELS

The model must perform the following manoeuvres:

Take-off or launch; right and left runs to be done flying towards and away from the pilot; climb; dive; vertical figure of eight spiral; and landing.

- a) Demonstrate a knowledge of the necessity for trim on models.
- b) Be able to perform pre-flight and post-flight checks on your models.
- c) Demonstrate a knowledge of safety guidelines to ensure safe flying.

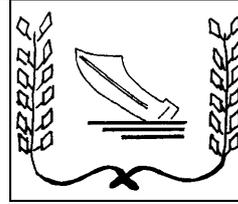
MODEL ENGINEER
INTEREST BADGE



Date Passed Signed

1. Prepare detailed plans for three working models.
2. Build and paint any two of these models and demonstrate their possibilities in action. Kits may not be used.

_____ 1 _____
_____ 2 _____

MOTORBOATMAN
INTEREST BADGE


Date Passed

Signed

NOTE: This badge can be carried out in a boat with outboard motors or inboard petrol or diesel motors, whichever is appropriate to the waters and conditions in which the Scout will normally operate. Not all the requirements are necessarily appropriate to all power boats. To assist the examiner, alternative requirements are listed for boats that are not permanently moored on the water, ie single or twin engine outboard motor powered boats.

1. Be at least 16 years of age and hold the Swimmer Interest Badge. _____
2. Explain, discuss and demonstrate that you know how to run a motorboat with reference to the following: _____

1

- a) Examine and report on the condition and use of the following equipment which must be onboard the boat: life-saving device for each person on board, fire extinguisher, oars or paddles, tool kit, emergency spare parts, horn, whistle and other sound signals, compass, anchor and line, first aid kit, bilge pump or bailer.

Alternative test for small outboard powered boats

Life-saving device for each person on board. (These must be donned before boarding and worn at all times whilst the boat is on the water.) Fire extinguisher, oars or paddles, tool kit including shear pin where applicable, and spark plugs, patches and air pump for rubber-hulled boats, device for making sound signals, compass, anchor and line, safety chains, first aid kit, bailer.

- b) Fuel and check the engine/s before starting. Demonstrate the correct fuelling procedures, including safety, for the appropriate engine.
- c) Carry out the following through the appropriate commands to your crew:
 - I. Start engines and get underway from a buoy or jetty.
 - II. Run a straight course for half a kilometre. Make right-angled turns port and starboard. Make a 'U' turn.
 - III. Stop the boat, drop anchor, raise anchor, and get underway.
 - IV. Demonstrate 'man-overboard' drill. Pick up a man overboard using methods appropriate to the boat being used.
 - V. Come alongside a jetty or buoy and moor.
 - VI. Moor boat at jetty or buoy for extended stay. Bear in mind prevailing winds, tides and water levels. Use appropriate stern and bow lines, springs and breast lines.
 - VII. Demonstrate the correct use of a boat hook.

Alternative test for small outboard powered boats

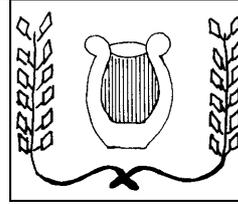
All of (c) excluding (vi) and (vii) but including the following:

- VIII. Change shear pin, where applicable, of an outboard motor whilst the boat is drifting in open water.
- IX. Explain the steps to be taken to secure a small power boat and its equipment overnight on shore.
- X. Launch the boat from a trailer and replace the boat on a trailer, fit chevron board, secure boat on trailer, hitch trailer to tow vehicle, fit all electrical connections and check that all lights and indicators work. Carry out safety check on trailer hitch and brakes.

2

MOTORBOATMAN INTEREST BADGE COTINUED

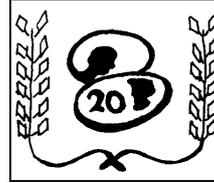
3. Know the rules of the road for all craft and know local regulations affecting power boats in your Area. Show that you are familiar with the rules relating to power boating _____ 3
4. Have a working knowledge of an internal combustion engine. Demonstrate that you have the ability to carry out the following, appropriate to the craft you normally use:
- a) For outboard motors - change and clean spark plugs, check magneto or distributor, mix oil with fuel for two-stroke motor, carry out normal service and safety check in accordance with the engine manufacturer's requirements; Show how to flush and store motor for prolonged lay-up.
- b) For inboard motors - change and clean spark plugs. Check and service points and condenser, change engine oil, fuel and oil filters. Check or change air tillers, service and check cooling system, carry out normal service and safety check in accordance with the engine manufacturer's requirements. (Produce manufacturer's operator's manual.)
- c) For inboard diesel motors - bleed the fuel system, change engine oil, oil and fuel filters, change or check air filters, service and check cooling system, carry out normal service and safety check in accordance with the engine manufacturer's requirements. _____ 4
5. Show that you have a knowledge of the principles of the action of the propeller in the water, both single and twin screws. Know and demonstrate how the position of a rudder affects the control of a craft when moving ahead or astern. Alternatively demonstrate going astern or turning with single or twin outboard motors. _____ 5
6. Plan and lead an expedition of 8 hours' duration on water, covering one or more of the following:
- Rescue duty Chart or mapmaking Fishing
- Water skiing Ecological study
- Submit a log of the expedition with charts, illustrations, crew duties, list of stores, kit etc, appropriate to the expedition. _____ 6
7. In addition to (6) provide a log signed by your Scouter, or person in charge, showing that you have completed at least 15 hours as skipper or crew in the motorboat of your choice. _____ 7

MUSICIAN
INTEREST BADGE


Date Passed

Signed

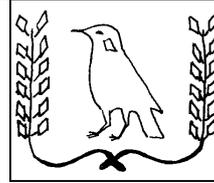
1. Demonstrate to the examiner that you have developed your natural gift for music over a period of at least a year by:
 - a) Performing on an instrument or singing unaccompanied a piece of music of your own choice
 - b) Discussing how you became interested in music and
 - c) Describing what measures you have taken to develop your talent. _____ 1
 2. Describe to the examiner all the component parts of the instrument of your choice, indicating what each part contributes to the whole musical effect and how to care for it. _____ 2
- OR**
- If the candidate is a singer, describe the various anatomical features of the body that are used in singing and the contribution that each makes to the overall tonal effect of the voice. _____ 2
3. Be familiar with staff or sol-fa notation and understand the significance of key signatures, chromatic scales and the symbols (such as rests, repeats, volume and trills) used for denoting scores. _____ 3
 4. Talk intelligently for about ten minutes on two of the following topics:
 - a) European musical development since the Renaissance
 - b) African, Indian or Chinese music
 - c) The origins of jazz
 - d) Current trends of music
 - e) Synthetic music
 - f) Military bands
 - g) Chamber music
 - h) Church music
 - i) At least 6 musical instruments
 - j) The grand organ
 - k) The history of the bagpipes and the development of the pipe music
 - l) Choir music. _____ 4
 5. Name five composers or performers of note in any era. Discuss the musical style of each and the impact of their music on society. _____ 5

NUMISMATIST
INTEREST BADGE


Date Passed _____ Signed _____

NOTE: The collection may consist of coins, bank notes, medals, medallions or tokens.

- | | | |
|---|-------|----------|
| 1. Make a collection of acceptable size and show it to the examiner and by using numismatic terminology, discuss your collection with the examiner. (eg Water-marks, production numbers, anti- counterfeit measures on paper money; and obverse, reverse, milling or mint marks on other items where applicable.) | _____ | <u>1</u> |
| 2. Describe how to handle, store and care for the items that you collect. | _____ | <u>2</u> |
| 3. Point out to the examiner the different grades of items in your collection, or items produced by the examiner. (Proof is the highest grade; uncirculated, fine and good are the other basic grades in descending order.) | _____ | <u>3</u> |
| 4. Describe how the items in your collection were manufactured. | _____ | <u>4</u> |
| 5. Demonstrate an understanding of why numismatic value is more often linked with rarity as opposed to age. | _____ | <u>5</u> |
| 6. Although not essential, it would be beneficial to the collector to place a rough value on his collection and be able to justify his valuation to the examiner. | _____ | <u>6</u> |
| 7. Name at least two places where your collection can be further researched. | _____ | <u>7</u> |


ORNITHOLOGIST
INTEREST BADGE

Date Passed _____ Signed _____

NOTE: The collection may consist of coins, bank notes, medals, medallions or tokens.

1. Demonstrate your knowledge of the main descriptive terms for the parts of a bird's anatomy by pointing out on a diagram:

a) The bill, legs, cere, shoulder, rail, vent, chest, back and iris.

b) Ten of the following:

Lores, culmen, upper mandible, lower mandible, front crown, nape, mantle, rump, flank, abdomen, breast, throat, chin, primaries, secondaries, axillaries, tarsus, ear coverts, cheek and gape.

2. Describe eight types of habitat used by birds.

3. Select FIVE of the following categories and name 3 birds from each. Point out the main field characteristics:

a) ground feeders;

a) arboreal feeders;

b) aquatic feeders;

c) aerial feeders;

d) waterside feeders;

e) heron family;

f) large raptors (greater than 450 mm in length)

g) small raptors (less than 450 mm in length)

4. From slides, photographs, or diagrams shown by the examiner, identify 10 out of 20 birds which can reasonably be expected to live within 50 km of your home.

5. Name and briefly describe:

a) Five migratory birds drawn from at least three different families

b) Five birds from the duck family, or five birds that inhabit the desert regions

c) Three brood parasites

d) Two territorial birds

e) Two birds that look alike, but which are from different families; or two birds from the same family that have vastly different feeding habits.

6. Explain the term "breeding plumage" and give three examples.

7. Complete one of the following:

a) Keep a log of bird sightings over a period of two weather seasons.

OR

b) Keep a log of bird sightings on one or more expeditions organised for the specific purpose, totalling more than five days. Describe the habitats of at least 10 of the birds.

OR

c) Produce a set of colour slides, colour or black-and-white photographs of birds taken on one or more bird-watching expeditions totalling more than five days. Be able to identify at least 10 of the species in the photographs and describe their habitats.

These photographs need not necessarily have been taken by you yourself, but must have been taken by one or more members of the party who took part in the expedition/expeditions with you.

 _____ 7 _____

PATROL LEADERSHIP
INTEREST BADGE


	Date Passed	Signed
1. Hold the Patrol Activity Scoutcraft Badge or fulfil all the requirements.	_____	<u>1</u> _____
2. In discussion with the examiner, show a good knowledge and understanding of the Functional Approach to Leadership (John Adair) in analysing what a leader does to make himself effective. Be able to draw and explain the three-circle diagram. Know nine skills of leadership and how to adopt them in the efficient running of a Patrol.	_____	<u>2</u> _____
3. Be a Patrol Leader for at least one year and lead your Patrol in gaining the "Star Patrol Award". (either received a Bronze, Silver or Gold Award)	_____	<u>3</u> _____
4. Show evidence of having trained at least one member of your Patrol in the requirements for the Adventurer and First Class Advancement Levels.	_____	<u>4</u> _____
5. Show that you are putting the Functional Approach to Leadership into practice in your Patrol and Troop.	_____	<u>5</u> _____

PETKEEPER
INTEREST BADGE


	Date Passed	Signed
1. Present evidence that you have kept and cared for your pet for at least 12 months.	_____	<u>1</u> _____
2. Show a knowledge of nutritional requirements for your pet, with particular attention to the differing nutritional requirements of the very young, very old and young-adult animal.	_____	<u>2</u> _____
3. Name at least three common ailments suffered by your breed of pet and show a basic knowledge of the treatment for these ailments.	_____	<u>3</u> _____
4. Either exhibit your pet at a pet show (not necessarily professionally), or breed your pet and show the offspring to the examiner.	_____	<u>4</u> _____
5. Produce evidence that you have trained your pet to respond either to your voice or other signals.	_____	<u>5</u> _____
6. Show a knowledge of the history and origins of the animal which you keep as a pet.	_____	<u>6</u> _____
7. Show the examiner your pet so that he may satisfy himself as to its condition.	_____	<u>7</u> _____
8. Explain first aid treatment for a broken bone, severe bleeding and an open wound in your pet.	_____	<u>8</u> _____

PHILATELIST
INTEREST BADGE

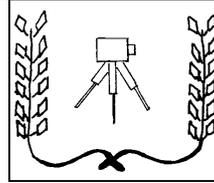

Date Passed

Signed

1. Make a neatly mounted collection of stamps and/or related postal material of either a country, or a related group of countries (eg Commonwealth, French colonies, southern Africa), or a subject or theme (eg jamborees, fauna and flora, railway post).

NOTE: The collection should be made over a period of at least one year and should reflect in its quality the time spent on it.

- | | | |
|--|-------|----------|
| 2. Demonstrate the use of a catalogue relevant to the collection and make an index of the collection. | _____ | <u>1</u> |
| 3. Show a good knowledge of 10-12 items from the collection selected at random by the examiner. | _____ | <u>2</u> |
| 4. Explain what is meant by five out of eight common terms relevant to the collection, chosen by the examiner | _____ | <u>3</u> |
| 5. Demonstrate how to remove used stamps from paper and how to prepare the stamps for a collection and know the precautions to be taken. | _____ | <u>4</u> |
| 6. Know something about the origins of postage stamps and how stamps are used to convey post around the world. | _____ | <u>5</u> |
| | _____ | <u>6</u> |


PHOTOGRAPHER
INTEREST BADGE

Date Passed _____ Signed _____

1. Take your camera and other equipment to the examiner and demonstrate how the equipment is used. Be prepared to answer questions on such things as loading and unloading the camera, how to adjust for focus, aperture, shutter speed etc. _____ 1
2. Explain to the examiner and be prepared to discuss the meaning of the term "focal length" of a lens. Explain what is meant by the term "normal focal length" and the advantages and disadvantages of using a lens with a greater or lesser focal length and the effect on the depth of field. _____ 2
3. The depth of field is also affected by the aperture. Explain to the examiner what is meant by the depth of field, what is meant by aperture, how the "f" number is derived and the circumstances in which you would use a greater or lesser aperture to take advantage of the effect on the depth of field. _____ 3
4. Most flash units are now automatic. Explain the advantages of when to use the automatic mode and when it is better to override and use the manual mode, ie explain what you would do in the case of taking flash of a person standing before a highly reflective, or alternatively against a non-reflective, surface. Explain what is meant by guide number and how this is used in the manual mode. _____ 4
5. Complete the tasks in Section A or Section B. _____ 5
 - A1. Produce a series of at least 20 photographs, developed and printed by yourself and enlarged to at least postcard size, of a Scouting event, that can be used as a training aid in the Troop or Pack, or can be used as a display at a parents' evening. The photographs should be mounted on a board, titled and labelled so that the viewer can follow your story line. _____ 6
 - A2. In addition to the photographs used in Section A1 take, develop and print three prints of at least postcard size, of each of the following subjects:
 - a) Portraiture
 - b) Architecture, showing three different architectural styles
 - c) Table top, still life or photographs taken from unusual angles. _____ 7
 One print from each section should be taken with flash, or with flash fill in.

OR

- B1 Produce at least 20 slides of an aspect of Scouting that can be used as a training aid, in the Troop or Pack or can be used to enhance a parents' evening. The slides should all be taken by you and should be arranged in a way that tells a story. The display should be accompanied by an audio tape with either music, or with a voice over, or with a printed commentary, complete with slide change indications; the choice of music and whether to use a voice over should be made to suit the story line.
- B2 Explain to the examiner how you would put slides into mounts and how you would mark the mounts to ensure their correct display. Explain when it becomes necessary for the slides to be placed in mounts with glass.
- B3 In addition to the slides used in Section B1 produce three slides of each of the following subjects:
 - a) Portraiture
 - b) Architecture, showing three different architectural styles
 - c) Table top, still life, or photographs taken from unusual angles.

 One slide from each section should be taken with flash, or flash fill in. _____ 8



Date Passed _____ Signed _____

1

**PHYSICAL FITNESS
INTEREST BADGE**

1. After a ten-minute warm up, complete the following endurance and stamina exercises in the given time for your age:

AGE	11	12	13	14	15	16
MERIT	5:20	5:10	5:00	4:50	4:40	4:30
STANDARD	6:00	5:45	5:30	5:20	5:15	5:05

- a) 15 Front lying, trunk raises (hypers)

Over a bench or other support. Hand position as for curlups. Stop at horizontal position.

- b) 20 Curlups (sit-ups)

Partner grasps ankles, legs must be bent to 90°, fingers locked behind neck, chin off chest, elbows must touch knees, head must return to the floor each time. Incorrect curlup does not count.

- c) 25 Pushups

Chest must touch clenched fist of partner. Incorrect pushup does not count.

- d) 20 Biceps curls

Standing in half squat position lifting 10% of body mass (sandbags).

- e) 20 Vertical jumps

To reach a point 25 cm above arm's length.

- f) 20 Lateral arm raises

Standing in half squat position lifting 10% of body mass (sandbags). Lift elbows laterally to 90°.

- g) 8 square shuttle runs

Mark out a square of 5 metres along each side. Each completed circuit counts as one.

- h) 10 Shuttle runs of 25 metres

Place two beacons 25 m apart. Each turn around a beacon counts as one.

2

2. Discuss the importance of individual sports (tennis, squash, golf etc) in keeping yourself physically fit in later life. Play at least one individual sport.

3

3. Participate in an outdoor cross-country race of at least 8 km in length.

4

4. Achieve the given standard for your age group in the following activities:

5

- a. HIGH JUMP (best of three jumps) Measurements in metres

Age	11	12	13	14	15	16
Merit	1,04	1,24	1,39	1,49	1,53	1,57
Standard	0,75	0,90	1,10	1,25	1,35	1,40

- b. STANDARD LONG JUMP (best of three jumps) Measurements in metres

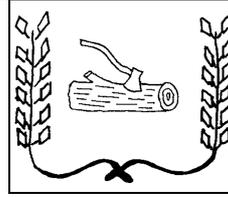
Age	11	12	13	14	15	16
Merit	2,10	2,25	2,40	2,53	2,65	2,77
Standard	1,67	1,77	1,96	2,08	2,18	2,28

- c. 50 METRE SPRINT (time in seconds to nearest tenth of a second)

Age	11	12	13	14	15	16
Merit	8,1	7,9	7,5	7,0	6,8	6,5
Standard	8,5	8,3	8,1	7,9	7,5	7,1

- d. 800 METRE RUN (time in minutes and seconds)

Age	11	12	13	14	15	16
Merit	2:32	2:27	2:21	2:14	2:06	2:09
Standard	3:05	2:59	2:53	2:44	2:48	2:36

PIONEER PHOTOGRAPHER
INTEREST BADGE


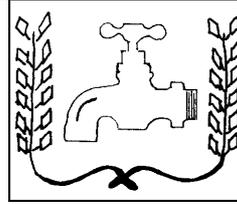
Date Passed Signed

- | | | |
|--|-------|----------|
| 1. Have passed the Pioneering Scoutcraft Badge, or complete all the requirements for it. | _____ | <u>1</u> |
| 2. Discuss with the examiner types of ropes and cordage (including man-made fibres) with particular regard to suitability for the job, strength and general care. Know the dangers of recoil and fracturing under strain. | _____ | <u>2</u> |
| 3. Using a rope which you have whipped using the sailmaker's whipping, make the following knots, hitches and lashings with a high degree of efficiency:

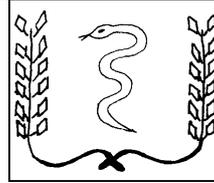
guyline hitch; blackwall hitch; barrel hitch; highwayman's hitch; scaffold hitch; constrictor knot; hunter's bend; double-sheetbend; fireman's chair knot; catspaw; carrick bend.

Japanese square lashing - Mark I and Mark II; Philipino lashing | _____ | <u>3</u> |
| 4. Demonstrate the following:
a) A Spanish windlass.
b) A rope tackle (Harvester's hitch).
c) Mousing a hook.
d) Reeving a 3-2 tackle.
e) Seizing a rope end.
f) Moving heavy weights by means of sheer legs, lever spar, parbuckle, and block and tackle. Know the purchase of various arrangements of block and tackle.
g) Removing a stubborn picket (lever spar).
h) Different types of anchorages, and when to use each type. | _____ | <u>4</u> |
| 5. Discuss with the examiner the need for safety and the dangers which arise from negligent leadership, ill-discipline, misuse of and overloading of gear, incorrect practices and bad planning. | _____ | <u>5</u> |
| 6. Construct a model of a pioneering project chosen from the list in (7) below, to a scale 1:20. Discuss with the examiner the purpose and advantages of constructing a model and then lead a team of at least four Scouts in constructing the project. | _____ | <u>6</u> |
| 7. Lead a team of no fewer than four Scouts in the construction of a project selected from the following list and take part as a member of a team of four Scouts in the construction of two other projects from the lists. | _____ | <u>7</u> |
| ONE PROJECT MUST BE CHOSEN FROM EACH OF THE SECTIONS A, B AND C | _____ | <u>8</u> |
| A. A tower with a platform height of at least 4 m above the ground. | _____ | <u>A</u> |
| B. A fun-type project such as: an aerial runway (know the aerial runway code), a swingboat, a merry-go-round, swinging derrick, a pile-driver or similar project approved by the examiner. | _____ | <u>B</u> |
| C. A monkey bridge, suspension bridge (Abington spring bridge or similar), draw-bridge or any other bridge of equal complexity approved by the examiner. | _____ | <u>C</u> |

(It is important that the project selected from this section shall make use of at least one block and tackle, a 3-2-1 or a log-and-picket holdfast.)

PLUMBER
INTEREST BADGE


	Date Passed	Signed
1. Demonstrate the use of five important plumber's tools.	_____	<u>1</u> _____
2. Make a drawing and explain the operation of the hot-and-cold water supply system in a house.	_____	<u>2</u> _____
3. Cut, thread and connect two pieces of galvanised pipe.	_____	<u>3</u> _____
4. Demonstrate your ability to solder copper piping. Include one tee, two straight pieces and one coupling.	_____	<u>4</u> _____
5. Submit a sketch plan to explain the drainage system of the plumbing in a house. Explain the purpose of the various components in the sketch.	_____	<u>5</u> _____
6. Demonstrate how to clear a choked waste pipe.	_____	<u>6</u> _____
7. Demonstrate a knowledge of the operation of a septic tank.	_____	<u>7</u> _____
8. Demonstrate the joining and laying of waste pipes.	_____	<u>8</u> _____
9. Adjust a toilet cistern to stop it overflowing.	_____	<u>9</u> _____



Date Passed

Signed

PUBLIC HEALTH
INTEREST BADGE

- | | | | |
|----|--|-------|----------|
| 1. | A. Discuss the principles of sewage purification and disposal. Obtain practical information from an official of your local authority.
OR
B. Explain how a community can dispose of sewage safely if there is no sewage treatment plant.
OR
C. Take part in installing a hygienic lavatory in an Area that does not have waterborne sewerage. | _____ | <u>1</u> |
| 2. | Discuss the principles of refuse disposal as it is applied in your local authority. Visit your local refuse disposal site in the company of an official of your local authority.
OR
If there is no municipal or other refuse disposal unit where you live, discuss the dangers which can be created if household refuse is not disposed of efficiently. Show that you practise hygienic refuse disposal at your home. | _____ | <u>2</u> |
| 3. | Name six diseases which can be prevented by immunisation in childhood. Know where and when these immunisations can be obtained. | _____ | <u>3</u> |
| 4. | Learn something about the two most important infectious diseases occurring in your community. Discuss the cause, mode of spread, treatment and prevention of these two diseases with the examiner. | _____ | <u>4</u> |
| 5. | Describe two simple methods of making water fit to drink. Show that you practise three basic methods of promoting good food hygiene in your home. | _____ | <u>5</u> |
| 6. | Take part in a health education project involving at least 20 families.
OR
Take part in a project to ensure a clean water supply in a place that does not have piped water. | _____ | <u>6</u> |
| 7. | Discuss some of the problems caused by human over-population. | _____ | <u>7</u> |