



PARACHUTE TECHNICIAN CERTIFICATE EXAM INSTRUCTIONS AND SAMPLE QUESTIONS

INSTRUCTIONS

- The PT exam is a closed book exam and must be done in accordance with NZPIA procedures, particularly chapter 2.7 of the Documents, Standards and Procedures Manual.
- There is no time limit for the exam.
- The Examiner will choose 50 questions from the list that follows for the candidate to answer.
 - **NOTE:** For Ram-Air-only ratings, no questions relating round parachutes will be selected.
- The passing grade is 70%.
- In the event a passing grade is not achieved, the candidate may retake the exam up to two more times without penalty. If the exam is failed three times the candidate may not re-take the exam again for a period of at least three months.

SAMPLE QUESTIONS

Regulations

- 1 If requested to pack a parachute intended for emergency use, in a manner other than the manufacturer's approved method, what should a certificated technician do?
- 2 If you receive a parachute for packing and find it is not airworthy, what steps should be taken?
- 3 A parachute technician should be knowledgeable of which rules & regulations?
- 4 Is it permissible to carry out parachute packing and/or maintenance while impaired by alcohol or drugs?
- 5 A certificated parachute technician may not pack and certify a parachute to which an Airworthiness Directive applies unless – ?
- 6 The packing, maintaining, or altering of a parachute must be carried out using procedures from where?
- 7 According to NZCAR 105, a parachute intended for emergency use should be completely inspected and repacked at least each – ?
- 8 A Parachute Technician must have access to sufficient tools, equipment, and facilities to be able to safely and pack, dry, air and maintain the types of parachutes to be serviced. This statement is correct for whom?
- 9 What constitutes a reportable equipment incident?
- 10 What should a certificated Parachute Technician do when, during the inspection of a parachute intended for emergency use, damage is found that is beyond his/her limitations for repairing?

Certification & Privileges

- 11 Which statement is correct in reference to Parachute Technician certification requirements when the applicant is the holder of an equivalent non-NZPIA rating?

- 12 If a parachute technician has not performed duties under his/her certificate within the last 12 months, he/she must – ?
- 13 What can be done to revalidate a lapsed Parachute Technician certificate?
- 14 Who is allowed to perform alterations to the reserve canopy of a parachute system to be used for intentional jumping?
- 15 What are the privileges of the basic Parachute Technician certificate?
- 16 Who may supervise and train other individuals in the proper methods and procedures of packing main parachutes?
- 17 Who may and inspect, maintain and certify serviceability of AADs as permitted by manufacturers' instructions?
- 18 Who may pack, maintain, and alter parachutes intended for emergency use in connection with civil aircraft?
- 19 Who may alter the auxiliary parachute of a single harness dual parachute pack?
- 20 In relation to a dual parachute pack used for intentional jumping, what may be carried out by the person who intends to use the parachute?

Records

- 21 A Parachute Technician is required to keep a record of the packing, maintenance, and alteration performed or supervised by him/her. What items are required to be entered in the record?
- 22 How long must a Parachute Technician retain a record of parachute packing, maintenance, and alterations?
- 23 After packing a parachute, a PT shall enter what on the packing record attached to the parachute?

Packing & Maintenance

- 24 During the assembly of approved parachute components, if a conflict arises between the canopy manufacturer's instructions and the container manufacturer's instructions, how should the technician proceed? Precedence should be given to the – ?
- 25 When packing a round parachute, after the right and left-hand gores have been properly folded, both groups of gores should be folded once – ?
- 26 When preparing a 28-foot chest canopy for folding, after the suspension lines have been equally divided between the left and right sides, where will the gore which contains the manufacturer's data be located if the canopy is laid out properly?
- 27 If when packing a round parachute with harness attached, you find the canopy, suspension lines, and harness twisted and tangled, what should be accomplished first?
- 28 The stowage location for the first bight of suspension lines is determined by – ?
- 29 When packing a parachute, what determines the width of the canopy folds?
- 30 When packing a ram-air canopy, if the leading edge of the canopy is folded inward and rolled tightly to the second line, how will the canopy perform?
- 31 What are satisfactory methods of determining the strength/deterioration of canopy fabric?

- 32 To facilitate suspension line pullout, the lines should be stowed so that they extend through the retainer loop – ?
- 33 What is the easiest way to insert Ram-air or square parachute canopies?
- 34 What action should be taken prior to opening a parachute pack that has been presented for repacking?
- 35 If both right and left groups of gores have been folded properly, how many gores cross the suspension lines?
- 36 The angle between the flight path and the cord line is referred to as the angle of – ?
- 37 The full cell of a ram-air canopy runs span wise from one – ?

Terms & Definitions

- 38 What is the definition of "gore" as it applies to a parachute canopy?
- 39 "Ripstop" is a term commonly used to describe – ?
- 40 Where are crossports located in a ram-air canopy?
- 41 The slider component of a parachute assembly – ?
- 42 "Porosity," as used in parachute terminology, is expressed in terms of the – ?
- 43 What one-word definition best describes a grommet?
- 44 The terms 'backpack' or 'chestpack' refer to the parachute assembly, less the – ?
- 45 Describe the construction of a gore as used in a bias-constructed type parachute canopy?
- 46 What tool is used to make the folds in the canopy and to smooth out the pack?
- 47 A suspension line hook is used to – ?
- 48 A deployment bag is used – ?
- 49 The purpose of stabilizer panels in a square parachute is to – ?

Storage

- 50 What is a satisfactory method of storing a nylon parachute for an extended period of time (6 months)?
- 51 Which chemicals should be used to prevent mildew of a parachute while in storage?

Fittings, Fasteners, etc.

- 52 Which hazard is associated with chrome plating of parachute hardware?
- 53 How far must the ripcord pins normally be pulled to unlock the pack?
- 54 Which statement describes the use, description, and type of material of grommets used in parachutes?

Ripcord

- 55 When a round reserve is sealed in accordance with the manufacturer's instructions, use low tensile strength thread to tie the – ?
- 56 When replacing a damaged ripcord with a serviceable one, what requirements must be met?
- 57 Before installation on a parachute assembly, a ripcord must withstand a minimum load of at least – ?
- 58 The pull required to cause positive and quick operation of the pack opening device shall not exceed – ?

- 59 Normally, ripcord cables are manufactured of – ?
60 What is the principal function of the ripcord housing?

Canopy

- 61 A crossport tear in a ram-air or square parachute may – ?
62 Describe the construction of a ram-air canopy.
63 Stabilizer panel burns on a square or ram air parachute are usually the result of – ?
64 Ripstop tape may be used for what purposes?

Lines & Knots

- 65 How is barrel-type quick link (Rapide link) oriented when installed between a riser and the suspension lines?
66 Suspension line breakage in ram-air canopies most often occurs at what line position?
67 Hand tacking should be tied off with what kind of knot?

Operations

- 68 Which could alleviate a hard opening ram air canopy?
69 What happens to the pilot chute of a square main canopy that has fully opened?
70 What is meant by the phrase "opening shock"?
71 A suspension line twist is an entanglement in which the lines are – ?
72 Crossports are usually located between A—B and C—D line attachment points. This area provides – ?
73 The amount of time required for a round canopy to fill with air is not affected by what factors?
74 The leading edge of a square parachute is open in order to – ?
75 Ram-air canopies of what aspect ratio receive the greatest benefit from stabilizer panels?
76 What component of a ram-air canopy assembly induces the greatest amount of parasitic drag?
77 When trimming a ram-air canopy, what flight characteristic is enhanced by pitching the nose down?
78 When packing a ram-air canopy, if the lines are not properly straightened, what malfunction could occur?
79 As canopy aspect ratio increases, glide angle – ?
80 As the exit weight is increased on a canopy the sink rate also increases. The glide angle will – ?
81 When one or more of the suspension lines pass over the top of the canopy during deployment, it is referred to as – ?
82 What would induce a persistent turn in a ram-air canopy?

Defects & Damage

- 83 What sorts of damage/defects must be rectified before releasing the equipment to service?
84 When necessary to clean a large area of a canopy to remove stains and dirt, what cleaning methods should be used?

- 85 What methods should be used to dry a parachute canopy that has been rinsed or soaked in clear water?
- 86 What is normally used to remove blood stains from parachutes?
- 87 Select the correct statement concerning the cleaning of a nylon parachute harness which has become soiled due to handling.
- 88 Perspiration stains on a parachute must be treated in the same manner as contamination from
- 89 How can sunlight damage to white nylon canopy fabric be identified?
- 90 What is used to neutralize the destructive effects of battery acid on parachutes?
- 91 Why is an acid stain more serious than any other type of stain on a parachute?
- 92 How can you detect the presence of acid on parachute fabrics?
- 93 A white crystalline substance on a parachute canopy or pack is evidence of a stain caused by – ?
- 94 Which method is commonly used to remove grease and oil stains from parachute canopies?
- 95 Which method is commonly used to remove mildew stain from a parachute canopy?
- 96 If a ripcord pin is slightly burred, what procedure should be followed?
- 97 A ripcord pin that is slightly bent is – ?

TSO-C23

- 98 Which specification is applicable to parachutes?
- 99 When combining components certificated under TSO-C23b and TSO-C23c, which component is the limiting factor for speed and weight?
- 100 What is the minimum pull allowed for the ripcord handle of a TSO-C23c parachute assembly?
- 101 In addition to other required markings, the stowage container of a TSO-C23c parachute assembly shall be marked with which information?
- 102 Which parts of a TSO-C23b parachute are required to be marked with the parachute model number, and date of manufacture?
- 103 A standard type parachute manufactured under TSO-C23b must be able to withstand opening shock loads of how many pounds?
- 104 Technical Standard Order-C23b requires certain information be marked on components of a parachute assembly. What information is required on the ripcord?
- 105 To meet TSO-C23b requirements, all fittings on a parachute must be – ?
- 106 A low-speed parachute to be certified under TSO-C23b must withstand a minimum shock load of – ?
- 107 What is the maximum pull in pounds allowed for the pack opening device of a TSO-C23b parachute?
- 108 Which document contains the specifications for TSO-C23b parachute assemblies?
- 109 Which of the following statements, if any, are correct?
- Low-speed parachutes must be marked in accordance with National Aircraft Standard (NAS) 804.
 - TSO-C23b auxiliary parachutes are required to have an inner pocket for keeping a record card.
- 110 Technical Standard Order-C23b provides specifications for which types of parachutes?