# **Industry Studies**

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## **Industry Studies**

In 2000 a total of 3046 candidates presented for the 2 Unit examination in Industry Studies in Hospitality (2010 candidates), Metal and Engineering (372 candidates) and Retail (664 candidates). The examination comprised a practical component and a written component. Both components were equally weighted.

## **Practical Examination – Hospitality**

#### General

Markers are thoroughly briefed on the variations of acceptable industry practice and these are accommodated in the marking of candidates' work. All work was closely monitored for standards of safety and hygiene, and in terms of production of a consistent, high quality product with minimal waste.

#### **Uniforms**

Candidates were generally well presented and had a true sense of professionalism in full chefs uniform. In a few instances where candidates did not meet the required standard, the most common problems observed were overly long trouser legs, and improper footwear.

## Personal hygiene

Markers announced to candidates prior to the commencement of the examination to remove all jewellery. If candidates chose not to observe this direction, they did not gain marks for hygiene and safety. Further hygiene problems arose when candidates touched their face or coughed, and failed to wash their hands.

#### Knife handling and safety

It was observed in some schools that candidates experienced difficulty in managing knives that had been recently sharpened. Candidates should be given every opportunity to practice precision cuts using sharp knives. Candidates need to develop their skills using the chef's knife with a slicing/rocking action, keeping the tip of the knife on the board.

#### Workflow

Candidates who did not recognise the importance of planning and workflow wasted valuable time. To facilitate efficient production, candidates should work sequentially through the tasks. For example, when working with vegetables, the first task is to wash, peel and rewash all vegetables at the same time. Also, having water on the stove in preparation for blanching while preparing the vegetables will save time. Having a tidy work area and cutting board also aids in efficient and safe workflow.

#### **Technique**

Peeling should be carried out over a scrap bowl to keep the workbench and cutting-board clean and tidy. The exception to this was peeling the orange. This is most safely carried out on the cutting board. Candidates had some trouble getting good results with the orange zest. The best results were obtained by cutting off the zest first before peeling. Some candidates used a peeler to carefully remove the zest and produced a consistent product. Many candidates were observed over-enthusiastically chopping the onion as you would parsley. Many tears were shed because of over chopping with dull knives resulting in an onion puree. Markers observed many candidiates' duxelles were either under-cooked (too wet, raw) or over cooked (too dry, greasy, dark). The mushrooms for duxelles were sometimes chopped too fine and

a prominence of onion was often observed. For further information on precision cutting techniques teachers are encouraged to refer to previous years' examination reports.

## **Practical Examination – Metal and Engineering**

#### General

Candidates who had prepared for, and practiced the job in the week prior to the examination, completed the task with time to spare, however the standard of the finished product varied widely. In keeping with the philosophy of competency based assessment, candidates are encouraged to practice the job and be familiar with all requirements of the engineering drawing.

## **Equipment**

The number of candidates examined per session was directly related to the number of drill presses available in the examination workshop. Equipment was generally adequate, with most workshops having been carefully set up prior to the markers' arrival. It is recommended that each candidate is provided with a kit of basic tools, and new drill bits be available.

#### Skill level and work flow

Candidates demonstrated a wide range of skill level, as is evidenced by the following observations.

- The best jobs were complete in all aspects accurate, well deburred, and cleaned up prior to assembly
- Deburring refers to cut surfaces and holes. A large proportion of candidates did not deburr as required.
- A significant number of candidates did not use parallel strips of either wood or steel to support their material when drilling holes.
- Some students spent significant time waiting for a drilling machine. This waiting time could have been spent more productively on other tasks.

#### Occupational health and safety

The majority of candidates observed appropriate occupational health and safety standards during the examination. Most were attired in correct footwear, overalls and safety glasses. The general standard of safe working practice was good, however in some instances markers' observed covers off machines and exposed wires.

## **Practical Examination – Retail**

## Question 1 (6 marks)

The better responses clearly displayed knowledge of the three types of costs (fixed, variable and semi-variable costs), and were able to show how these costs impacted upon the retailer.

## Question 2 (4 marks)

The best responses clearly outlined and discussed the relationship between sales and profit to the retailer, and identified two strategies that could be implemented by a retailer to reduce costs.

## Question 3 (5 marks)

The better candidates listed three specialty services, eg banking, dry cleaning, hairdressing, and described the benefits to the retailer. Appropriate examples were used to clarify their explanations.

#### **Question 4 (5 marks)**

Better candidates outlined two reasons for stock rotation, ie obsolete lines, shelf life, presentation, and removal of damaged stock, and they further explained how stock rotation increases store profit.

#### **Question 5 (2 marks)**

The best responses gave a precise definition of "selling up" and explained that the technique was used successfully when the customer was unsure about purchasing a particular product.

## Question 6 (5 marks)

Most candidates explained that in-house credit was used only in a particular store, and that universal credit was used across a range of stores. The steps for processing universal credit was well answered.

#### **Question 7 (5 marks)**

Generally most students understood the procedures for placing items "on hold", the benefits gained by the store and the method for processing a "raincheck".

## **Question 8 (4 marks)**

Better candidates gave precise explanations of psychological needs and how these influence consumers' behaviour. Examples included new trends, status, power, and social experience.

## Question 9 (4 marks)

The best responses clearly identified two factors that made customers unhappy with service eg unfriendly staff, waiting in queues. They went on to describe the negative impact of poor customer service on the retailer, eg loss of reputation resulting in a loss of customers, future sales and profit.

#### Question 10 (10 marks)

The best responses identified the three main sources of theft linking these to the concept of shrinkage. These candidates provided a comprehensive discussion of at least four preventative security measures and outlined how these are used to reduce or prevent external theft. They also provided an accurate discussion of the correct procedures to be followed in the apprehension of a potential shoplifter.

## Written Examination

#### Section I — Core

## Multiple Choice (15 marks)

#### **Correct Answers**

Question	Answer	Question	Answer	Question	Answer	Question	Answer
1	В	5	A	9	В	13	C
2	A	6	C	10	C	14	A
3	C	7	A	11	A	15	В
4	A	8	D	12	D		

## Short-response answers (23 marks)

## **Question 16**

The question required a brief definition of the terms casual work, superannuation and retrenchment, with appropriate workplace examples to be given of how each operates in industry. In general, candidates approached this question well and provided focussed responses. A considerable number of candidates found it difficult to support their definitions with an example. The best responses were able to identify several major features of each term.

## **Question 17**

The question required the identification a range of strategies that address common pollution concerns in the workplace, and methods of pollution control that could be used by employees. The better responses suggested some of the following:

- Water pollution do not pour oil or toxic substances down the drain. Collect and recycle.
- Noise pollution suggest to management insulation of noisy areas, restrict the operation of noisy equipment, wear ear protection.
- Reduction of waste recycle, reuse, and compost. Separate waste to facilitate recycling and reuse, limit packaging.
- Reduce carbon dioxide emissions reduce energy consumption by installing timers.

#### **Question 18**

The question tested candidates understanding of EEO – the principle of merit, equal and fair treatment, and combating unfair treatment of disadvantaged groups – and how the principles of EEO are applied in the workplace. The best responses referred to:

- Elimination of discriminatory barriers,
- Inequality,
- Establishment of an EEO plan,
- Reference to areas where discrimination is unlawful.

These answers gave a wholistic response describing associated components of EEO legislation, ie antidiscrimination, affirmative action: superseded by EEO Act 1999. They discussed direct and indirect discrimination relative to the Act and factors influencing EEO in the workplace. Examples given were relevant and clearly presented.

## Extended response answers (32 marks)

## **Question 19**

This question required a discussion of the effects of multi-skilling on productivity, on-the-job and off-the-job training, and career pathways. The question required candidates to refer to their focus industry.

Generally, candidates demonstrated an understanding of the impact of multi-skilling on productivity and discussed the concept of a more skilled and flexible workforce. Retail candidates sometimes related the term productivity to knowledge of the product they were selling. Candidates found most difficulty in discussing the effects of multi-skilling in relation to on and off-the-job training. Very few candidates were able to relate to this concept in a way that demonstrated a clear understanding of training.

The best responses gave clear examples and an explanation of the relationship of multi-skilling to productivity. They used examples such as TAFE courses and formal/informal training as a strategy for increasing productivity levels. Some candidates were able to identify the negative aspects of on/off the job training to productivity in the short term, and were further able to identify a need to balance short-term loss against long term gain as a result of a more skilled, flexible workforce. Many often referred to horizontal, vertical and diagonal multi-skilling, even though this was not a requirement of the question.

#### **Question 20**

The question required candidates to describe and evaluate a range of methods used to add-value to products and services offered by enterprises in the candidate's focus industry.

Responses could have taken one of two approaches:

- (i) Demonstration of how the stages of production add value to a product, eg farmed wool → mill → sale of woollen garments in a retail outlet.
- (ii) Description of how enterprises in the focus industry use a range of strategies to add value, eg location, quality of product/service, fittings, presentation etc.

In evaluating the process it was necessary to indicate how each step/method allowed the enterprise to increase prices and theoretically increase customer returns, sales and thereby profits.

The best responses defined value added, and/or demonstrated an understanding of the concept through the use of examples. They clearly described at least three relevant examples and evaluated the process, clearly indicating how the enterprise was able to increase prices for the product or service.

## Section II — Hospitality Strand (30 marks)

#### **Question 1**

This questioned examined quality characteristics of food and food storage. Many candidates were unable to distinguish between perishable, semi-perishable and non-perishable foods.

The better candidates selected examples of food that allowed them to demonstrate their depth of knowledge and understanding in the question. They were also able to give more detailed responses, addressing all aspects of the question, ie perishability, selection of food, storage and possible consequences of incorrect storage.

## **Question 2**

This question examined the concept of safe food hygiene, in particular cross-contamination, the danger zone, and personal hygiene standards.

Overall candidates had a good understanding of personal hygiene and were able to give examples of how to reduce cross-contamination. Candidates tended to have greater difficulty identifying the danger zone.

## **Question 3**

The question required candidates to examine the diet of a seventy-year old woman in relation to the Australian Dietary Guidelines, and to further explain the specific nutritional needs of older people.

It was evident that the majority of the candidates had some knowledge of the Australian Dietary Guidelines (ADGs), particularly in relation to fat, salt and sugar. The best responses outlined four or more of the ADGs that specifically related to the given diet. These answers were concise and the candidates were able to link the specific ADG with examples in the diet and/or suggestions of what should have been included – nutrient dense foods, reduced energy/low fat foods, calcium to prevent osteoporosis, and iron to prevent anaemia.

## **Question 4**

The question required candidates to plan a formal, three-course lunch menu for eight people, and to justify the choice of dishes selected in the menu.

The majority of candidates were able to suggest an appropriate three-course meal. The better responses described the food items in the menu by either identifying the cooking method, and/or all the food commodities contained in the dish. A number of candidates incorrectly restricted their discussion to nutrition (ADGs). The better responses clearly explained their choice of menu, justifying each dish using criteria such as variety of colour, texture, and flavour.

## Section II — Metal and Engineering Strand (30 marks)

#### **Question 1**

In this question most candidates showed reasonable skills in interpreting the drawing of the Jeweller's Vice, however, some showed little knowledge of tools and their uses. This was particularly the case in listing the taps required to cut the M4 thread in a blind hole.

#### **Question 2**

In general, candidates showed a lack of understanding in listing an appropriate sequence of processes for completing a routine Metal and Engineering practical task. Good responses used concise points and associated appropriate tools to each process. The majority of candidates were aware of workshop safety considerations. Very few candidates understood and answered the question concerning "fits". The identification of wrenches and pliers was generally handled well although many candidates used non-technical terminology.

## **Question 3** (Orthogonal)

Candidates attempting this question used 3<sup>rd</sup> angle principles appropriately, and interpreted the size and shape of the actuator arm within the tolerances allowed. Very few were able to correctly dimension the object using standard techniques.

## **Question 4** (Isometric)

This question proved popular among candidates. Good responses viewed the bracket from the correct direction and used the starting point. A majority of candidates failed to use centre lines and proper construction techniques for the isometric circles. The details of the recess were well interpreted by many candidates.

## **Question 5** (Tangency)

A large number of candidates answered this question well, being able to use appropriate instruments to locate and draw centres, circles and tangents. In poorer responses the ability to construct a hexagon was limited, as was the skills required in locating the centres for the R120 and R70 arcs. Many candidates resorted to guessing the centres for these arcs and consequently, limiting points and the points of tangency were incorrect.

## Section II — Retail Strand (30 marks)

## **Question 1**

Overall candidates displayed an adequate understanding of the terms listed in the question: obsolete lines, rational buying motives, cash register float, credit rating. The best responses were clear and concise in their definitions and able to use the appropriate language relating to the retail syllabus document. The definition of credit rating was the least satisfactorily answered.

## **Question 2**

Most candidates gave definitions of the terms rather than providing ONE implication of consumer credit for cash flow, customer loyalty and storage of goods. Little linkage was evident between the terms and their application to consumer credit. The better candidates showed evidence of having read the question fully.

## **Question 3**

Most candidates were able to describe the circumstances under which a "No refunds and no exchanges" policy may be illegal. The better candidates were able to correctly identify the Fair Trading Act (NSW), and to explain other issues covered under this Act. Some candidates were confused between the Fair Trading Act (NSW) and the Trade Practices Act (C'wth).

## **Question 4**

The better candidates were able to explain the relationship between total quality management (TQM) and the retail industry. A considerable number of candidates restricted their discussion to listing the principles rather than explaining then.

## **Question 5**

This extended response question required a discussion of how product knowledge could be used to increase sales. Further discussion was necessary on how a professional salesperson could acquire product knowledge and how this knowledge could be used in the selling-up technique, the add-on sales technique, and in dealing with customer objections.

Generally, candidates demonstrated an understanding of the role of a professional salesperson, though some demonstrated a lack of specific knowledge on acquiring product knowledge and dealing with customer objections. The better candidates were able to provide a comprehensive discussion of the methods for acquiring product knowledge and they demonstrated a conceptual understanding of how product knowledge could be used to sell-up, deal with customer objections, and finally complete an addon sale. These candidates also linked the successful execution of these selling techniques to an increase in sales.