



National Examining Board for Dental Nurses

NEBDN National Diploma in Dental Nursing

Information on the Written Examination Format

NEBDN has developed new assessment criteria for use in the NEBDN Diploma in Dental Nursing examination. This is completely different to the current National Certificate examination, as the written section of the Diploma consists of a mixture of Single Best Answer questions in the form of Multiple Choice Questions (MCQs) and Extended Matching Questions (EMQs). This document provides information to Training Providers and students on how to approach the written section of the new NEBDN Diploma in Dental Nursing examination.

Multiple Choice Questions (MCQs)

The new style of MCQ has the full title of 1 from 5, single best answer MCQ and are written as follows;

- The question itself is usually two or three sentences long
- Typically, the first sentence introduces the topic of the question
- The final sentence usually asks a specific question based on the information given
- They are designed to test the application of the relevant knowledge
- Key words or phrases are not highlighted
- There are always five answer options
- Only one of those five will be the 'best', and therefore the correct, answer. Other options are not necessarily completely wrong, but there will always be one option that is clearly better than the others
- The answers are always homologous – of the same form (so, all micro-organisms, all periodontal instruments, all filling materials, and so on)
- They are always set out alphabetically or numerically in ascending order

As the question style always follows the same pattern, it is not possible for candidates to 'work out by elimination' or 'guess' the correct answer – they must have the relevant knowledge and the understanding to be able to apply it to the scenario of the question. Only then can the single best answer be identified.

Similarly, as a logical alphabetical or numerical order is always followed in the answers, the correct answer cannot be determined by seeing how many times, say, option d) has been an answer, and therefore not choosing it again.

The single best answer will be at whichever option letter it falls at alphabetically or numerically only. So it is quite feasible, for example, for an examination to have option d) as the correct answer for almost every question asked, if the correct answer



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happens to fall at the position of option d) alphabetically or numerically. Consequently, the candidate is unable to guess the answer.

Candidates mark their single answer choice on an optical marking sheet. For each question, they indicate the answer they have chosen by pencilling in a small box through the relevant option. Only one box must be filled in, otherwise the computer will reject that question. Similarly, the box must be filled in horizontally – drawing a circle around it or marking an answer option with a cross will also cause the computer to reject that question.

If a candidate needs to change an answer, they must erase the incorrect one thoroughly (not cross it out) otherwise the computer will reject the answer sheet.

Below are three examples of the new style of 1 from 5, single best answer MCQs used in the new NEBDN National Diploma examination:

1. A gingivectomy procedure is to be carried out on an epileptic patient. The technique will involve the removal of hyperplastic gingival tissue from the buccal side of the upper left premolar teeth. Which one of the following nerves must be anaesthetised to allow the procedure to be carried out painlessly?
 - a) Greater palatine nerve
 - b) Inferior dental nerve
 - c) Long buccal nerve
 - d) Middle superior dental nerve
 - e) Posterior superior dental nerve

The correct answer is d).

The question clearly states that only the buccal gingivae of the upper premolar teeth will be involved in the procedure, so the nerve supplying this area simply needs identifying from the options listed. Only the middle superior dental nerve is relevant to the question.

2. In patients suffering from chronic periodontitis, both supragingival calculus and subgingival calculus may be present at the same time. Which one of the following options is a periodontal instrument that is used specifically to remove subgingival calculus?
 - a) Curette
 - b) Jaquette scaler
 - c) Push scaler



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- d) Sickle scaler
- e) Ultrasonic scaler

The correct answer is a).

The question asks for the instrument that is used specifically to remove subgingival calculus. Although an ultrasonic scaler can be used for this purpose, it is not specifically so, and can be used to remove supragingival calculus too. All of the other options listed are used to remove supragingival calculus only, therefore option a) is the single best answer.

3. Various regulations and legislations apply to the safe running of dental workplaces. Which one of the following options applies to the COSHH regulations?
- a) Accidents at work
 - b) Chemicals
 - c) Fire extinguishers
 - d) Pressure vessels
 - e) Radiation hazards

The correct answer is b).

The candidate must know what COSHH stands for, and is relevant to, before being able to choose the single best answer from the options list.

Extended Matching Questions (EMQs)

This style of question follows a similar layout to the MCQ in some respects, and was introduced to replace the short answer style question.

The short answer style question, such as those used in Section 3 of Part A in the National Certificate examination, allowed the candidate to supply their own answer in the space provided. This then created many 'partially correct' answers, which had to be considered and either included or discounted from a definitive marking guide, before the paper could be marked.

With extended matching questions, this problem is overcome as all candidates have the same definitive option list provided for each set of questions, in the examination paper. There is no opportunity for the candidates to create an answer, as only the options listed can be used.

Usually, each options list has several questions (a question set) attached to it.



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Occasionally, though, there may be just one question for an option list.

The EMQ style questions are written as follows;

- The topic covered by the question set is stated, to help focus the candidate's thoughts
- A lead in statement is then given which explains what the candidate is required to do, and how many options they are required to choose from the list, for each question. Usually, candidates are required to select just one option. If more than one option is required, this will always be clearly stated
- The option list is then given, and it will usually contain a minimum of eight options
- The options are always homologous – of the same form (so all surgical instruments, all micro-organisms, and so on)
- They are always set out alphabetically or numerically in ascending order
- The questions are set out as several sentences giving a detailed scenario
- They are designed to test analytical and reasoning skills, as well as requiring a more detailed and concise application of knowledge
- Key words or phrases are not highlighted
- Each topical option list usually has several questions set to it, but sometimes there is only one

The candidate is required to understand the question and apply detailed knowledge to be able to reason the answer(s) from the option list. Below are two different examples of a question set, each to its own option list, of the EMQ style of question used in the new NEBDN National Diploma examination:

Topic: Dental Pathology

For each of the following dental pathology questions, select the single most appropriate micro-organism from the option list. Each option might be used once, more than once, or not at all.

- a) Bacillus fusiformis
- b) Candida albicans
- c) Coxsackie virus
- d) Epstein-Barr virus
- e) Herpes simplex
- f) Paramyxovirus
- g) Porphyromonas gingivalis
- h) Staphylococcus aureus
- i) Streptococcus mutans



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1. An eighteen year old patient attends the surgery as an emergency, complaining of severe gingival pain and halitosis. He admits to being a smoker, and brushing his teeth only once every few days. On examination, his oral hygiene is very poor and his gingivae are swollen and sloughing at the papillae. The dentist diagnoses acute necrotising ulcerative gingivitis. Which one of the options listed is a micro-organism associated with this condition?

The correct answer is a).

The clinical scenario describes the signs and symptoms of the condition, and then states the disease that is present. The candidate must then apply their knowledge of micro-organisms that cause this condition, and locate it from the option list. With a more extensive option list, the lead in statement could ask for two appropriate micro-organisms from the list, making it a harder question still.

Alternatively, the name of the disease diagnosed can be left out of the question, so that the candidate then has to determine it from the signs and symptoms themselves, before being able to choose the correct option from the list – again, this would then become a harder question still.

2. Many adult patients suffer from chronic periodontitis, especially those with risk factors such as smoking and certain medical conditions. Research has discovered that there are many different micro-organisms involved in this condition, some occur in most patients and others are less often found. Which one of the options listed is one of the micro-organisms linked to chronic periodontal disease?

The correct answer is g).

As the question stem states, there are many micro-organisms that have been linked to chronic periodontal disease, but the only one listed as an option is *Porphyromonas gingivalis*. Others include *Actinomyces* species, *Prevotella intermedia*, and *Treponema denticola*.

Again, if any of these had been added to the option list, the question could have asked for more than one choice to be stated, making the question harder.

The following example shows a style of questioning that requires analysis and reasoning by the candidate:

Topic: Oral Health Advice and Procedures

For each of the following oral health scenarios, select the single most appropriate point of advice or instruction from the option list. Each option might be used once, more than once, or not all.



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- a) Advice on toothbrushing
- b) Apicectomy
- c) Completion of a diet sheet
- d) Disclosing tablet use
- e) Flossing instruction
- f) Fluoride tablet use
- g) Fluoride toothpaste use
- h) Gingivectomy
- i) Prophylaxis polishing
- j) Reduce acid intake
- k) Reduce sugar intake
- l) Subgingival scaling
- m) Supragingival scaling
- n) Tooth restoration with amalgam filling
- o) Tooth restoration with crown

1. A twenty three year old female office assistant attended the practice with a chipped tooth, which had happened the previous evening at a local bar. She complained of general tooth sensitivity to cold foods and drinks for the past few months, and was concerned that her teeth were 'crumbling' despite her low sugar diet regime.
- On examination, the dentist discovered a minimal incisal edge chip of the lower left central incisor which required smoothing only. There were no cavities and the teeth had clean shiny enamel generally. Which one of the options listed is the most likely advice to be given to this patient?

The correct answer is j).

The candidate must analyse the information given in the question, to determine the following points.

Clean, shiny enamel with thinning incisal edges is a classic sign of acid erosion. The general sensitivity of the teeth has been produced by the gradual thinning and stripping away of the enamel surface layers, so that the pulp tissue is more easily thermally stimulated.

2. A thirty five year old male attended the practice with a painless sinus associated with the upper right central incisor, which had been present intermittently for several months. He complained of an occasional bad taste and tenderness over the tooth.
- On examination, the dentist noted the tooth had a firm and well-fitting crown present, and a radiograph showed the presence of a post in the root filled tooth. Which one of the options listed is the procedure most likely to be recommended for this patient?



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The correct answer is b).

The candidate must analyse the information given in the question, to determine the following points.

The tooth is already root filled and the canal is sealed with a post crown restoration. Recurrent infection has occurred at the apex of the tooth, which can be successfully managed by an apicectomy procedure. The alternatives would be to remove the post crown and re-root fill the tooth (so requiring a new post crown), or to extract the tooth.