

Joint Committee on Intercollegiate Examinations

CODING DEFINITION GUIDE

Section 1: Key Topic¹

Only ONE box to be selected. If Professional Behaviour & Leadership non-specialty specific (PBLnss) is selected then one or multiple ticks MUST be selected in Section 2.

- Key topics are those that all trainees will cover by CCT and will be able to manage independently, including complications. These are also referred to as essential topics.
- These key topics are to be found within each specialty syllabus – www.iscp.ac.uk

Section 2: Professional Behaviour & Leadership¹

Multiple boxes can be selected

Acting with integrity / probity	History and examination	Personal development
Assessment of teaching	Infection control	Promoting good health
Audit	Leadership	Quality and safety improvement
Breaking bad news	Legal framework for medical practise	Safe prescribing
Clinical reasoning	Management and NHS structure	Self awareness
Communicate with patients	Medical consent	Teaching skills
Communication with colleagues	Medical error	Team working
Ethical research	Medical ethics and confidentiality	Time management and decision making
Evidence and guidelines	Patient as focus of care	Training skills
	Patient safety	Not applicable

The Professional Behaviour and leadership elements¹ are mapped to the leadership curriculum as laid out by the Academy of Medical Royal Colleges. The assessment of these areas is a thread running through the curriculum and this makes them common to all of the disciplines of surgery.

The curriculum is broad based and blueprinted to the Good Medical Practice framework to ensure that surgeons completing the training programme are more than just technical experts.

Section 3: Type of Question

Multiple boxes can be selected (The contents of this box differ slightly for several specialties)

Basic Sciences	Materials & Technology	Physiology
Anatomy	Microbiology	Professional skills
Data Interpretation & Statistics	Nutrition	Public Health & Epidemiology
Embryology	Pathology	Staging
Endocrine & Metabolic Disorders	Patient assessment	Not elsewhere classified
Guidelines	Patient management	
Imaging	Pharmacology	
Immunology		

This section is to aid the analysis of the question banks by recording the topic area of the Key Topic. This field will not be used for blueprinting of the examination but to inform chairs and question writers of gaps within the question bank.

Section 4: ISCP Domains¹
Only ONE box to be selected.

• Knowledge
• Judgement
• Technique
• Professional

The Intercollegiate Surgical Curriculum divides training into four areas or domains – Knowledge, Judgement, Technique and Professionalism.

ISCP Domains		GMP Domains			
Knowledge	Trainees are expected to progress from ‘knowing’ to ‘knowing when’ and ‘knowing how’ to use the knowledge acquired. The levels for knowledge expected are indicated on the following four point scale: 1. knows of; 2. knows basic concepts; 3. knows generally; 4. knows specifically and broadly.	1. Knowledge, Skills & Performance			
		2. Safety and Quality			
		3. Communication, Partnership & Teamwork			
Judgement	Trainees demonstrate the use of judgement in a wide range of important day to day activities: in the collection and interpretation of data; in making clinical decisions; carrying out diagnostic therapeutic and surgical procedures and when communicating with patients and healthcare providers. They are also expected to respond appropriately to emergencies and demonstrate insight into the limitations of their expertise.	1. Knowledge, Skills & Performance			
		2. Safety and Quality			
		3. Communication, Partnership & Teamwork			
		4. Maintaining Trust			
Technique	Trainees are expected to demonstrate good technique in their clinical and operative skills. The levels of technique are indicated on the following four point scale: 1. has observed; 2. can do with assistance; 3. can do whole but may need assistance; 4. competent to do without assistance, including complications.	1. Knowledge, Skills & Performance			
		2. Safety and Quality			
Professional	Professional surgeons are committed to clinical competence, they practice in an ethical manner and have high personal standards of behaviour. Professional attitudes are complementary to good knowledge, technique and judgement and enable surgeons to provide effective patient-centred care.	1. Knowledge, Skills & Performance			
		2. Safety and Quality			
		3. Communication, Partnership & Teamwork			
		4. Maintaining Trust			

Section 5: Blooms Taxonomy

Only ONE box to be selected.

• Knowledge & Comprehension
• Application & Analysis
• Synthesis and Evaluation

Bloom and colleagues (1956) described six categories in the cognitive domain. These are:

1. Knowledge recall	4. Analysis
2. Comprehension or understanding	5. Synthesis
3. Application	6. Evaluation.

Bloom's taxonomy is a hierarchical classification, with the lowest cognitive level being 'knowledge recall' and the highest, 'evaluation of knowledge'. The lower levels can be attained with superficial learning, such as memorisation, but the upper levels involve higher order thinking and can only be attained by deep learning. How we pose exam questions determines the cognitive level that we are testing.

Below are the six cognitive levels and some key verbs that can be used in questions pitched at each level.

				Synthesis	Evaluation
					judge
			Analysis	plan	appraise
	Application		distinguish	compose	evaluate
	Comprehension	interpret	analyse	design	rate
Knowledge	explain	apply	differentiate	formulate	value
define	describe	employ	compare	construct	revise
list	express	use	contrast	create	score
recall	locate	organise	categorise	setup	select
name	review			manage	choose
				prepare	assess
					estimate

The six levels can be unnecessarily complex and they can be telescoped as follows:

- A. **Knowledge & comprehension**; i.e. reproducing and understanding
- B. **Application & analysis**; i.e. making use of knowledge
- C. **Synthesis & evaluation**; i.e. doing different things with knowledge and making use of judgement

Bloom's taxonomy and Miller's pyramid

While the relationship is complex, it is sometimes useful to think of the bottom level of Miller's pyramid ('knows') as equating to 'knowledge and understanding' in the telescoped version of Bloom's taxonomy (level A). Application, analysis, synthesis and evaluation (Bloom's levels 3 to 6 or B and C in the telescoped version) fall into the 'knows how' level of Miller's pyramid.

Section 6: Area of Interest
Only ONE box to be selected

**Generality of the Specialty;
Sub Specialty**

These two fields indicate whether the question is applicable to all trainees within that sub-specialty (Generality of the Specialty) or to a sub-set of trainees (Sub-Specialty).

This may occur when trainees are examined in a sub-specialty - for example in General Surgery where trainees may elect a specialist area e.g. breast or colorectal etc. They would then be expected to have a higher level of knowledge in their sub-specialist area than other sub-specialty areas.

For example there are questions in colorectal surgery that all trainees would be required to know (e.g. colonic obstruction) but other questions that would be knowledge required of only in a specialist area – e.g. detailed management of faecal incontinence.

Generic – Applicable to all specialties

- This field denotes a question that is suitable or can be modified to be suitable across all specialties.
- These would be so identified and offered to other question banks.
- Examples would be statistics questions, questions on governance, ethics etc.