CONFIDENTIAL

The National Clinical Coding Examination [UK]

27 September 2016

Paper 1 Practical - ANSWERS
9:30 am - 12:35 pm
[THREE HOURS]

Please spend the first 5 minutes reading through the ‘Instructions to Candidates’

This Examination Paper consists of 2 Sections: A and B.

Section A – Practical Coding [30% of the Marks]
Answer all questions in the spaces provided on the Examination Paper.

Section B – Case Studies [70% of the Marks]
Case Studies 1-7.
Answer all questions using the Answer Sheets provided.
Write only on one side of the Answer Sheets provided.
Section A [1] 15%
Write your candidate number on EVERY page

ICD-10 codes are required for the first 15 questions [1 – 15]
[OPCS-4 codes are NOT required]

Provide appropriate code(s) for the following conditions in the boxes alongside each question. If more than one code is required, please use separate boxes for each code to make sequencing clear, for example, box 1 should contain the primary diagnosis code.
[The number of boxes is not necessarily indicative of the number of codes required].

Question 1
**Mediterranean anaemia with sickle-cell trait. [3 Marks]**

<table>
<thead>
<tr>
<th>CODES AND TITLES</th>
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<tbody>
<tr>
<td>D56.9 Thalassaemia, unspecified</td>
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**Index:**
- Anemia D64.9
- Mediterranean D56.9

**Tabular:**
- D56.9 Thalassaemia, unspecified

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Question 2
**Post enucleation socket syndrome, right sided. [6 Marks]**

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<th>CODES AND TITLES</th>
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<tr>
<td>H59.8 Other postprocedural disorders of eye and adnexa</td>
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<tr>
<td>Y83.6 Removal of other organ (partial) (total)</td>
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</tbody>
</table>

**Index:**
- Complications (from) (of)
- eye H57.9
- - postoperative H59.9
- - - specified NEC H59.8

Or

- Complications (from) (of)
- surgical procedure T81.9
- - eye H59.9
- - - specified NEC H59.8

**Tabular:**
- H59.8 Other postprocedural disorders of eye and adnexa

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<td>1.</td>
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<td>2.</td>
<td>Y83.6</td>
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Question 3

**Perforation of the pars flaccida with associated acute secretory otitis media. [6 Marks]**

**CODES AND TITLES**

- H65.0 Acute serous otitis media
- H72.1 Attic perforation of tympanic membrane

**Index:**

- Perforation, perforated (nontraumatic)
  - pars flaccida (ear drum) H72.1

**Tabular:**

- H72.1 Attic perforation of tympanic membrane

**Question 4**

Patient with multiple sclerosis admitted for treatment of 3rd and 4th degree piles. Also noted to have a hypertrophied anal skin tag. [8 Marks]

**CODES AND TITLES**

- K64.3 Fourth-degree haemorrhoids
- K64.4 Residual haemorrhoidal skin tags
- G35.X Multiple sclerosis

**Index:**

- Piles – see Hemorrhoids

- Hemorrhoids (bleeding) (without mention of degree) K64.9
  - 4th degree (grade/stage IV) (with prolapse that cannot be
manually replaced) K64.3

**Tabular:**
K64.3 Fourth-degree haemorrhoids

**Index:**
Tag (hypertrophied skin) (infected) L91.8
- anus K64.4

**Tabular:**
K64.4 Residual haemorrhoidal skin tags

**Index:**
Sclerosis, sclerotic
- multiple (brain stem) (cerebral) (generalized) (spinal cord) G35

**Tabular:**
G35 Multiple sclerosis

**Question 5**

Known type 2 diabetes admitted for treatment of nuclear sclerosis cataract. Patient has diabetic retinopathy. [10 Marks]

**CODES AND TITLES**
H25.1 Senile nuclear cataract
E11.3† Type 2 diabetes mellitus - with ophthalmic complications
H36.0* Diabetic retinopathy (E10-E14 with common fourth character .3†)

**Index:**
Cataract (cortical) (immature) (incipient) *(see also Cataracta)*
H26.9
- nuclear
- - sclerosis H25.1

**Tabular:**
H25.1 Senile nuclear cataract

**Index:**
Diabetes, diabetic (mellitus) (controlled) (familial) (severe)
E14.-
- type 2 (nonobese) (obese) E11.-
  Or

Diabetes, diabetic (mellitus) (controlled) (familial) (severe)
E14.-
- retinopathy - code to E10-E14 with fourth character .3
Tabular:
E11 Type 2 diabetes mellitus .3† With ophthalmic complications

Index:
Retinopathy (background) (Coats) (exudative) (hypertensive) H35.0
- diabetic (see also E10-E14 with fourth character .3) E14.3†
H36.0*

Or
Retinopathy (background) (Coats) (exudative) (hypertensive) H35.0
- in (due to)
- - diabetes (see also E10-E14 with fourth character .3) E14.3†
H36.0*

Tabular:
H36.0* Diabetic retinopathy (E10-E14 with common fourth character .3†)

Question 6
Admitted for treatment of clawtoe. Also known to have clawhand. [7 Marks]

CODES AND TITLES
Q66.8 Other congenital deformities of feet
M21.54 Acquired clawhand, clubhand, clawfoot and clubfoot - Hand

Index:
Clawtoe (congenital) Q66.8
Tabular:
Q66.8 Other congenital deformities of feet

Index:
Clawhand (acquired) M21.5
Tabular:
M21.5 Acquired clawhand, clubhand, clawfoot and clubfoot - Hand

Question 7
Methicillin resistant staphylococcus aureus (MRSA) sepsis, resistant to vancomycin. [9 Marks]

CODES AND TITLES
1. A41.0
2. U82.1
3. U83.0
4.
### A41.0 Sepsis due to Staphylococcus aureus

**Index:**
- Sepsis (generalized) *(see also Infection)* A41.9
  - Staphylococcus, staphylococcal A41.2
  - *- aureus A41.0

**Tabular:**
- A41.0 Sepsis due to Staphylococcus aureus

**Index:**
- Resistance, resistant (to)
  - antibiotic, antibiotics U83.9
  - *- methicillin U82.1

**Tabular:**
- U82.1 Resistance to methicillin

**Index:**
- Resistance, resistant (to)
  - antibiotic, antibiotics U83.9
  - *- vancomycin U83.0

**Tabular:**
- U83.0 Resistance to vancomycin

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### Question 8

**Patient with known chronic obstructive pulmonary disease and emphysema, admitted with Klebsiella pneumoniae chest infection. [9 Marks]**

**CODES AND TITLES**
- J44.0 Chronic obstructive pulmonary disease with acute lower respiratory infection
- B96.1 Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified to other chapters
- J43.9 Emphysema, unspecified

**Index:**
- Disease, diseased – *(see also)* Syndrome
  - lung J98.4
  - *- obstructive (chronic) J44.9
  - *- with
  - *- - - lower respiratory infection (except influenza) J44.0

**Or**

---
Disease, diseased – see also Syndrome
- airway, obstructive, chronic J44.9
- - with
- - - lower respiratory infection (except influenza) J44.0

Tabular:
J44.0 Chronic obstructive pulmonary disease with acute lower respiratory infection

Index:
Klebsiella (K.) pneumoniae, as cause of disease classified elsewhere B96.1

Or
Infection, infected (opportunistic) B99
- Klebsiella (K.) pneumoniae NEC A49.8
- - as cause of disease classified elsewhere B96.1

Tabular:
B96.1 Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified to other chapters

Index:
Emphysema (atrophic) (chronic) (interlobular) (lung) (obstructive) (pulmonary) (senile) J43.9

Or
Disease, diseased – see also Syndrome
- lung J98.4
- - obstructive (chronic) J44.9
- - - with
- - - - emphysema J43.9

Or
Obstruction, obstructed, obstructive
- airway J98.8
- - with
- - - - emphysema J43.9

Tabular:
J43.9 Emphysema, unspecified

Question 9
Periprosthetic hip fracture following a fall down the stairs at home. Patient has ischaemic heart disease. [9 Marks]

CODES AND TITLES
M96.6 Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate
W10.0 Fall on and from stairs and steps - home
I25.9 Chronic ischaemic heart disease, unspecified
Index:
Complications (from) (of)
- prosthetic device, graft or implant T85.9
  - joint T84.9
  - - fracture, bone M96.6

Or

Complications (from) (of)
- orthopedic
  - fracture (following insertion of implant, joint prosthesis, bone plate) M96.6

Or

Fracture (abduction) (adduction) (avulsion) (comminuted) (compression) (dislocation) (oblique) (separation) T14.2
  - bone T14.2
  - following insertion of orthopedic implant, joint prosthesis or bone plate M96.6

Tabular:
M96.6 Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate

Index:
Fall, falling (accidental) W19
  - down
  - - stairs, steps (involving ice or snow) W10

Or

Fall, falling (accidental) W19
  - from, off
  - - stairs, steps (involving ice or snow) W10

Tabular:
W10 Fall on and from stairs and steps

0 Home

Index:
Disease, diseased – see also Syndrome
  - heart (organic) I51.9
  - - ischemic (chronic or with a stated duration of over 4 weeks) I25.9

Tabular:
I25.9 Chronic ischaemic heart disease, unspecified

Question 10
Newborn born in hospital with acute bronchitis caused by respiratory syncytial virus (birth episode). [9 Marks]

CODES AND TITLES

1. P28.8
2. Z38.0
3. J20.5
P28.8 Other specified respiratory conditions of newborn
Z38.0 Singleton, born in hospital
J20.5 Acute bronchitis due to respiratory syncytial virus

Index:
Conditions arising in the perinatal period
- disease, diseased – see also Conditions arising in the perinatal period, syndrome
- - respiratory (tract)
  - - - newborn P28.9
  - - - - specified type NEC P28.8
Or
Disease, diseased – see also Syndrome
- respiratory (tract) J98.9
  - - newborn P28.9
  - - - specified type NEC P28.8

Tabular:
P28.8 Other specified respiratory conditions of newborn

Index:
Infant(s) – see also Infancy
- liveborn (singleton) Z38.2
  - - born
  - - - in hospital Z38.0
Or
Newborn (infant) (liveborn) (singleton) Z38.2
  - born in hospital Z38.0

Tabular:
Z38.0 Singleton, born in hospital

Index:
Bronchitis (diffuse) (fibrinous) (hypostatic) (infective) (membranous) (with tracheitis) (15 years of age and above) J40
- acute or subacute (with bronchospasm or obstruction) J20.9
  - - due to
  - - - respiratory syncytial virus J20.5

Tabular:
J20.5 Acute bronchitis due to respiratory syncytial virus
Question 11

Patient with Alzheimer’s dementia admitted with excessive sweating because she accidentally overdosed on Galantamine. [15 Marks]

CODES AND TITLES
T44.0 Anticholinesterase agents
X43.9 Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system - unspecified place
R61.9 Hyperhidrosis, unspecified
G30.9† Alzheimer disease, unspecified
F00.9* Dementia in Alzheimer disease, unspecified (G30.9†)

Index:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Poisoning Chapter XIX</th>
<th>Accidental</th>
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<tbody>
<tr>
<td>Galantamine</td>
<td>T44.0</td>
<td>X43</td>
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</tbody>
</table>

Tabular:
T44.0 Anticholinesterase agents
X43 Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system
.9 Unspecified place

Index:
Sweating, excessive R61.9
Or
Excess, excessive, excessively
- secretion (see also Hypersecretion)
- - sweat R61.9
Or
Excess, excessive, excessively
- sweating R61.9

Tabular:
R61.9 Hyperhidrosis, unspecified

Index:
Alzheimer’s disease or sclerosis G30.9
- dementia in G30.9† F00.9*

Tabular:
G30.9 Alzheimer disease, unspecified

Index:
Dementia (persisting) F03
- Alzheimer’s type G30.9† F00.9*
- in (due to)
- Alzheimer's disease G30.9† F00.9*
  Tabular:
  F00.9* Dementia in Alzheimer disease, unspecified (G30.9†)

**Question 12**

**Acute intoxication of Mephedrone. [3 Marks]**

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<tr>
<th>CODES AND TITLES</th>
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<tbody>
<tr>
<td>F15.0 Mental and behavioural disorders due to use of other stimulants, including caffeine - acute intoxication</td>
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</tbody>
</table>

**Index:**

- Intoxication
  - amfetamine (or related substance) (acute) F15.0

**Tabular:**

F15 Mental and behavioural disorders due to use of other stimulants, including caffeine

| 0 Acute intoxication |   |

**Question 13**

**Pemphigus caused by Penicillamine. [6 Marks]**

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<th>CODES AND TITLES</th>
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<tbody>
<tr>
<td>L10.5 Drug-induced pemphigus</td>
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<tr>
<td>Y57.2 Antidotes and chelating agents, not elsewhere classified</td>
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</table>

**Index:**

- Pemphigus L10.9
  - drug-induced L10.5

**Tabular:**

L10.5 Drug-induced pemphigus

<table>
<thead>
<tr>
<th>Adverse effect in therapeutic use</th>
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<tbody>
<tr>
<td>Penicillamine</td>
<td>Y57.2</td>
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</table>

**Tabular:**

Y57.2 Antidotes and chelating agents, not elsewhere classified
### Question 14

**Adenocarcinoma of caecum and ileum. Point of origin cannot be identified. Known current smoker. [6 Marks]**

<table>
<thead>
<tr>
<th>CODES AND TITLES</th>
<th>1. C26.8</th>
<th>2. F17.1</th>
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<tr>
<td>Neoplasm, neoplastic</td>
<td>C80.9</td>
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<tr>
<td>- digestive organs, system, tube or tract NEC</td>
<td>C26.9</td>
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<tr>
<td>- gastrointestinal (tract) NEC</td>
<td>C26.9</td>
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<td><strong>Tabular:</strong></td>
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<td>C26.8 Overlapping lesion of digestive system</td>
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<td>Abuse</td>
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<td>- tobacco F17.1</td>
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<td><strong>Tobacco (nicotine)</strong></td>
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<td>- harmful use F17.1</td>
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<td>F17 Mental and behavioural disorders due to use of tobacco - harmful use</td>
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### Question 15

**Cystic fibrosis causing rectal prolapse and bronchiectasis. Admitted under gastroenterology specialist. [12 Marks]**

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<td>Fibrosis, fibrotic</td>
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<td>- cystic (of pancreas) E84.9</td>
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<td>- - with</td>
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<td>- - - intestinal manifestations E84.1</td>
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<td>E84.1 Cystic fibrosis with intestinal manifestations</td>
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<td>Prolapse, prolapsed - rectum (mucosa) K62.3</td>
<td>K62.3 Rectal prolapse</td>
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<td>Fibrosis, fibrotic - cystic (of pancreas) E84.9 - - with - - - pulmonary manifestations E84.0</td>
<td>E84.0 Cystic fibrosis with pulmonary manifestations</td>
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<td>Bronchiectasis (cylindrical) (diffuse) (fusiform) (localized) (saccular) J47</td>
<td>J47 Bronchiectasis</td>
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Section A [2] 15%
Write your candidate number on every page

OPCS-4.7 codes are required for the next 15 questions [16 – 30]
[ICD-10 codes are NOT required]

Provide appropriate code(s) for the following interventions/procedures in the boxes alongside each question. If more than one code is required, please use separate boxes for each code to make sequencing clear, for example, box 1 should contain the primary procedure/intervention code. [The number of boxes is not necessarily indicative of the number of codes required].

Question 16

Shave excisional biopsy of mole of skin of left eyebrow. [9 Marks]

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<td><strong>S06.3</strong> Shave excision of lesion of skin of head or neck</td>
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<td><strong>Z94.3</strong> Left sided operation</td>
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<td>Z94.- Laterality Operations</td>
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<td>Z94.- Operations Laterality</td>
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<td>Z94.3 Left sided operation</td>
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Question 17

**Fine-needle aspiration biopsy of lesion of right spermatic cord. [9 Marks]**

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<tr>
<th>CODES AND TITLES</th>
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<tbody>
<tr>
<td>N20.2 Biopsy of spermatic cord</td>
<td>1</td>
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<tr>
<td>Y20.4 Fine needle aspiration NOC</td>
<td>2</td>
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<tr>
<td>Z94.2 Right sided operation</td>
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**Index:**

N20.2 Biopsy Spermatic Cord

**Tabular:**

N20.2 Biopsy of spermatic cord

**Index:**

Y20.4 Aspiration Fine Needle NOC

**Tabular:**

Y20.4 Fine needle aspiration NOC

**Index:**

Z94.2 Right sided Operations

Or

Z94.2 Operations Right Sided

Or

Z94.- Laterality Operations

Or

Z94.- Operations Laterality

**Tabular:**

Z94.2 Right sided operation

---

Question 18

**Free omental flap reconstruction of the left breast with concurrent insertion of breast prosthesis. [9 Marks]**

<table>
<thead>
<tr>
<th>CODES AND TITLES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B39.5 Reconstruction of breast using free omental flap</td>
<td>1</td>
</tr>
<tr>
<td>B30.1 Insertion of prosthesis for breast</td>
<td>2</td>
</tr>
<tr>
<td>Z94.3 Left sided operation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Index:**

B39.5 Reconstruction Breast Flap Free Omental

**Tabular:**

B39.5 Reconstruction of breast using free omental flap

**Index:**
### Question 19

**Refashioning of episiotomy scar. [6 Marks]**

**CODES AND TITLES**

1. **P13.8** Other specified other operations on female perineum
2. **S60.4** Refashioning of scar NEC

**Index:**

1. P13.- Perineum Female Operations NEC
2. Or
3. P13.- Perineum Skin Female Operations NEC
4. Or
5. P13.- Skin Perineum Female Operations NEC

**Tabular:**

P13.8 Other specified other operations on female perineum

**Index:**

1. S60.4 Refashioning Scar NEC
2. Or

**Tabular:**

S60.4 Refashioning of scar NEC

### Question 20

**LeFort II maxillary osteotomy with application of internal fixation of maxilla. [6 Marks]**

**CODES AND TITLES**

1. **V10.3** Osteotomy of maxilla involving nasal complex
2. **V11.2** Internal fixation of maxilla NEC

**Index:**

1. Or
2. Or
3. Or
4. Or
5. Or
6. Or
Question 21

Patient admitted for a second stage autologous chondrocyte implantation into the right knee joint using an open approach. [12 Marks]

CODES AND TITLES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>W71.4</td>
<td>Open autologous chondrocyte implantation into articular structure</td>
</tr>
<tr>
<td>Y71.1</td>
<td>Subsequent stage of staged operations NOC</td>
</tr>
<tr>
<td>Z84.6</td>
<td>Knee joint</td>
</tr>
<tr>
<td>Z94.2</td>
<td>Right sided operation</td>
</tr>
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</table>

Index:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>W71.4</td>
<td>Implantation Articular Structure Chondrocyte Autologous Open</td>
</tr>
</tbody>
</table>

Tabular:

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>W71.4</td>
<td>Open autologous chondrocyte implantation into articular structure</td>
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</tbody>
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<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Y71.1</td>
<td>Operations Staged Subsequent NOC</td>
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Tabular:

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Y71.1</td>
<td>Staged Operations Subsequent NOC</td>
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Index:

<table>
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<tr>
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<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z84.6</td>
<td>Joint Leg Upper site</td>
</tr>
</tbody>
</table>
Question 22

Colonoscopy to hepatic flexure with biopsies of descending colon and transverse colon. Internal haemorrhoids banded during colonoscopy. [9 Marks]

**CODES AND TITLES**

1. H52.4 Rubber band ligation of haemorrhoid
2. H22.1 Diagnostic fibreoptic endoscopic examination of colon and biopsy of lesion of colon
3. Z28.4 Transverse colon

**Index:**

H52.4 Banding Haemorrhoid

**Tabular:**

H52.4 Rubber band ligation of haemorrhoid

**Index:**

H22.- Colonoscopy NEC

**Tabular:**

H22.1 Diagnostic fibreoptic endoscopic examination of colon and biopsy of lesion of colon

**Index:**

Z28.- Colon site

**Tabular:**

Z28.4 Transverse colon
### Question 23

**Vaginal hysterectomy and excision of periuterine tissue. An anterior colporrhaphy with mesh reinforcement was also carried during the same theatre visit. [6 Marks]**

**CODES AND TITLES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>P23.6 Anterior colporrhaphy with mesh reinforcement</td>
</tr>
<tr>
<td>2.</td>
<td>Q08.2 Vaginal hysterectomy and excision of periuterine tissue NEC</td>
</tr>
</tbody>
</table>

**Index:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>P23.-</td>
<td>Colporrhaphy NEC</td>
</tr>
<tr>
<td>Or</td>
<td></td>
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<tr>
<td>P23.-</td>
<td>Repair Vagina Prolapse NEC</td>
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**Tabular:**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>P23.6</td>
<td>Anterior colporrhaphy with mesh reinforcement</td>
</tr>
</tbody>
</table>

**Index:**

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<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Q08.-</td>
<td>Hysterectomy Vaginal</td>
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<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>Q08.-</td>
<td>Excision Periuterine Tissue &amp; Hysterectomy Vaginal NEC</td>
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**Tabular:**

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>Q08.2</td>
<td>Vaginal hysterectomy and excision of periuterine tissue NEC</td>
</tr>
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</table>

### Question 24

**Bilateral truncal vagotomy and pyloroplasty. [9 Marks]**

**CODES AND TITLES**

<p>| | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>A27.1 Extracranial truncal vagotomy</td>
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<tr>
<td>2.</td>
<td>Z94.1 Bilateral operation</td>
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<tr>
<td>3.</td>
<td>G40.3 Pyloroplasty NEC</td>
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**Index:**

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<th></th>
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</thead>
<tbody>
<tr>
<td>A27.-</td>
<td>Vagotomy NEC</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>A27.-</td>
<td>Excision Nerve Vagus (x) NEC</td>
</tr>
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</table>

**Tabular:**

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<table>
<thead>
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<th></th>
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<tbody>
<tr>
<td>A27.1</td>
<td>Extracranial truncal vagotomy</td>
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**Index:**

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<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>Z94.1</td>
<td>Bilateral Operations</td>
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<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>Z94.1</td>
<td>Operations Bilateral</td>
</tr>
<tr>
<td>Or</td>
<td></td>
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</tbody>
</table>
**Z94. - Laterality Operations**

**Tabular:**
- Z94.1 Bilateral operation

**Index:**
- G40. - Pyloroplasty
- G40. - Incision Pylorus

**Question 25**

Percutaneous coronary artery angioplasty with insertion of one drug-eluting and one expanding metal stent using intravascular ultrasound guidance under fluoroscopic control. [12 Marks]

**CODES AND TITLES**

<table>
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<tbody>
<tr>
<td>K75.1</td>
<td>Percutaneous transluminal balloon angioplasty and insertion of 1-2 drug-eluting stents into coronary artery</td>
</tr>
<tr>
<td>Y14.2</td>
<td>Insertion of expanding metal stent into organ NOC</td>
</tr>
<tr>
<td>Y53.2</td>
<td>Approach to organ under ultrasonic control</td>
</tr>
<tr>
<td>Y53.4</td>
<td>Approach to organ under fluoroscopic control</td>
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</tbody>
</table>

**Index:**

- K75.1 Angioplasty Artery Coronary Balloon & Insertion Stent Drug-eluting Transluminal Percutaneous
- Y14.2 Insertion Artery Coronary Stent Drug-eluting & Angioplasty Balloon Transluminal Percutaneous

**Tabular:**

- K75.1 Percutaneous transluminal balloon angioplasty and insertion of 1-2 drug-eluting stents into coronary artery

**Index:**

- Y14.2 Insertion Stent Expanding Metal NOC

**Tabular:**

- Y14.2 Insertion of expanding metal stent into organ NOC

**Index:**

- Y53.2 Approach Control Ultrasonic
- Y53.2 Approach Ultrasonic Control
### Question 26

**Endoscopic change of ureteric stent into left ureter. [6 Marks]**

<table>
<thead>
<tr>
<th>CODES AND TITLES</th>
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<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
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<tbody>
<tr>
<td>M29.5 Endoscopic renewal of tubal prosthesis into ureter</td>
<td>M29.5</td>
<td>Z94.3</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z94.3 Left sided operation</td>
<td></td>
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</table>

**Index:**

- M29.5 Prosthesis Ureter Tubal Renewal Endoscopic
- M29.5 Endoscopic renewal of tubal prosthesis into ureter

**Tabular:**

- M29.5 Endoscopic renewal of tubal prosthesis into ureter

**Index:**

- Z94.3 Left Sided Operations
  - Or
  - Z94.3 Operations Left Sided
    - Or
  - Z94.- Laterality Operations
    - Or
  - Z94.- Operations Laterality

**Tabular:**

- Z94.3 Left sided operation

---

### Question 27

**Repair of recurrent ventral hernia using mesh prosthetic material and open relief of strangulated ileum. [6 Marks]**

<table>
<thead>
<tr>
<th>CODES AND TITLES</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
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</thead>
<tbody>
<tr>
<td>T98.2 Repair of recurrent ventral hernia using insert of</td>
<td>T98.2</td>
<td>G76.2</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**prosthetic material**

**G76.2 Open relief of strangulation of ileum**

**Index:**
T98.2 Repair Hernia Ventral Insert Material Prosthetic Recurrent

**Tabular:**
T98.2 Repair of recurrent ventral hernia using insert of prosthetic material

**Index:**
G76.2 Relief Ileum Strangulation Open

**Tabular:**
G76.2 Open relief of strangulation of ileum

---

**Question 28**

**Magnetic resonance cholangiopancreatography (MRCP) with contrast. [9 Marks]**

**CODES AND TITLES**

1. **U16.2 Magnetic resonance cholangiopancreatography**
2. **Y97.3 Radiology with post contrast**
3. **Y98.1 Radiology of one body area (or < 20 minutes)**

**Index:**
U16.2 Cholangiopancreatography Magnetic Resonance

Or

U16.2 MRCP Magnetic Resonance Cholangiopancreatography

**Tabular:**
U16.2 Magnetic resonance cholangiopancreatography

**Index:**
Y97.- Contrast Radiology

Or

Y97.- Radiology Contrast

**Tabular:**
Y97.3 Radiology with post contrast

**Index:**
Y98.- Radiology Procedures

**Tabular:**
Y98.1 Radiology of one body area (or < 20 minutes)
### Question 29

**Wedge tarsectomy correction of congenital deformity of the right foot. [6 Marks]**

#### CODES AND TITLES
- **X25.2** Wedge tarsectomy for correction of congenital deformity of foot
- **Z94.2** Right sided operation

#### Index:
- X25.2 Tarsectomy Wedge Correction Foot Deformity Congenital
  - Or
- X25.2 Correction Foot Deformity Congenital Tarsectomy Wedge

#### Tabular:
- X25.2 Wedge tarsectomy for correction of congenital deformity of foot

#### Question 30

**Bronchoscopy with biopsies of carina and left bronchus and washings of left bronchus. [12 Marks]**

#### CODES AND TITLES
- **E49.1** Diagnostic fibreoptic endoscopic examination of lower respiratory tract and biopsy of lesion of lower respiratory tract
- **Y21.8** Other specified cytology of organ NOC
- **Z24.5** Bronchus
- **Z94.3** Left sided operation

#### Index:
- E49.1 Biopsy Bronchus NEC
  - Or
- E49.1 Biopsy Carina Endoscopic NEC
<table>
<thead>
<tr>
<th>Tabular: E49.1 Diagnostic fibreoptic endoscopic examination of lower respiratory tract and biopsy of lesion of lower respiratory tract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index: Y21.- Cytology NOC</td>
</tr>
<tr>
<td>Tabular: Y21.8 Other specified cytology of organ NOC</td>
</tr>
<tr>
<td>Index: Z24.5 Bronchus site</td>
</tr>
<tr>
<td>Tabular: Z24.5 Bronchus</td>
</tr>
<tr>
<td>Index: Z94.3 Left Sided Operations</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>Z94.3 Operations Left Sided</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>Z94.- Laterality Operations</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>Z94.- Operations Laterality</td>
</tr>
<tr>
<td>Tabular: Z94.3 Left sided operation</td>
</tr>
</tbody>
</table>
Section B [70%]
Write your candidate number on EVERY page

Answer all 7 questions in this Section using the Case Study Answer Sheets provided

Case Study Number 1 [18 Marks]

Appropriate index trails are required for this Case Study only. To obtain full marks they must exactly replicate the full content of the ICD-10 and OPCS-4.7 Alphabetical Indexes for each code assigned.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>General Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>Mr Shah</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>20&lt;sup&gt;th&lt;/sup&gt; May 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>23&lt;sup&gt;rd&lt;/sup&gt; May 2016</td>
</tr>
<tr>
<td>History</td>
<td>Has a history of abdominal pains that became severe, with associated sweating. A CT scan carried out in the Outpatient Department demonstrated gallstones. Admitted now for a laparoscopic cholecystectomy.</td>
</tr>
<tr>
<td>Co-morbidities</td>
<td>BMI 30, anxiety, depression.</td>
</tr>
<tr>
<td>Procedure</td>
<td>Patient anaesthetised. Port incisions made and laparoscopic ports placed. CO2 inflation of the abdomen. A laparoscope was inserted through the belly button port and connected to the camera. This showed an extremely inflamed gallbladder, which would have been problematic to remove laparoscopically. The decision was made to convert to an open procedure. An incision was made under the border of the right rib cage, clamps were placed on the cystic duct and artery, the gallbladder lifted, clamped and cut. The gallbladder was then carefully removed – sent to pathology. The cystic duct and artery were ligated and the incision closed. All port incisions were sutured.</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Gallstones with acute cholecystitis.</td>
</tr>
<tr>
<td>Management</td>
<td>Recovered well and discharged.</td>
</tr>
</tbody>
</table>
### Case Study Number 1

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
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</thead>
<tbody>
<tr>
<td>1. K80.0</td>
<td>1. J18.3</td>
</tr>
<tr>
<td>2. F41.9</td>
<td>2. Y71.4</td>
</tr>
<tr>
<td>3. F32.9</td>
<td>3.</td>
</tr>
</tbody>
</table>

**INDEX TRAILS AND TABULAR ENTRIES**

**ICD-10**

**Index:**
- Gallstone (colic) (cystic duct) (gallbladder) (impacted) (multiple) K80.2
  - with cholecystitis (chronic) K80.1
  - - acute K80.0
  
  Or

- Cholecystitis K81.9
  - acute K81.0
  - with
  - - calculus, stones in
  - - - gallbladder K80.0

**Tabular:**
- K80.0 Calculus of gallbladder with acute cholecystitis

**Index:**
- Anxiety F41.9

**Tabular:**
- F41.9 Anxiety disorder, unspecified

**OPCS-4.7**

**Index:**
- J18.- Cholecystectomy NEC
  - Or
- J18.- Excision Gall Bladder NEC
  - Or
- J18.- Cholecystectomy Total

**Tabular:**
- J18.3 Total cholecystectomy NEC
  - Includes: Cholecystectomy NEC

**Index:**
- Y71.4 Approach Minimal Access Failed Converted to Open
  - Or
- Y71.4 Failed Minimal Access Approach Converted to Open

**Tabular:**
- Y71.4 Failed minimal access approach converted to open
Case Study Number 2 [25 Marks]

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Oncology</th>
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<tbody>
<tr>
<td>Consultant</td>
<td>Ms Philips</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>14th June 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>16th June 2016</td>
</tr>
</tbody>
</table>

History
Known to have prostate adenocarcinoma with intrapelvic lymph node and bone secondaries. Admitted for radioactive seed implantation.

Relevant co-morbidities
Paroxysmal atrial fibrillation on Clexane anti-coagulant.

Management/Treatment
Patient had a transrectal ultrasound two weeks ago as preparation to ensure proper placement of the seeds and treatment plan to be carried out.
Admitted today for the radioactive seed implantation into the prostate under general anaesthetic.

Discharge
Procedure carried out without incident and patient discharged with an Outpatient appointment date.

Case Study Number 2

<table>
<thead>
<tr>
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<th>OPCS-4.7 Codes</th>
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<tbody>
<tr>
<td>1. C61.X</td>
<td>1. X68.3</td>
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<tr>
<td>2. C77.5</td>
<td>2. M70.6</td>
</tr>
<tr>
<td>3. C79.5</td>
<td>3. X65.3</td>
</tr>
<tr>
<td>4. I48.0</td>
<td>4. Y36.3</td>
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<tr>
<td>5. Z92.1</td>
<td>5. Y80.9</td>
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</tbody>
</table>

INDEX TRAILS AND TABULAR ENTRIES

ICD-10 Index:
Adenocarcinoma – see also Neoplasm, malignant

OPCS-4.7 Index:
X68.- Preparation Brachytherapy
Tabular:
X68.3 Preparation for interstitial brachytherapy

Index:
M70.6 Implantation Prostate Seed Radioactive
### Malignant Neoplasm, Neoplastic

<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>C80.9</td>
<td>C79.9</td>
</tr>
</tbody>
</table>

- **C80.9** Malignant neoplasm of prostate
- **C79.9** Secondary malignant neoplasm of bone and bone marrow

### Fibrillation

- **I48.9** Atrial or auricular (established)
- **I48.0** Paroxysmal atrial fibrillation

### History (personal) (of)

#### Tabular:
- **M70.6** Radioactive seed implantation into prostate
  
  **Note:** Use an additional code to specify radiotherapy delivery (X65)

#### Index:
- **X65.-** Delivery Radiotherapy
  - **Or**
  - **X65.-** Radiotherapy Delivery

#### Tabular:
- **X65.3** Delivery of a fraction of interstitial radiotherapy
  
  **Note:** Use a subsidiary code to identify introduction of radioactive material (Y35, Y36)

#### Index:
- **Y36.3** Implantation Seed Radioactive NOC
  - **Or**
  - **Y36.3** Radioactive Seed Implantation NEC

#### Tabular:
- **Y36.3** Radioactive seed implantation NOC

#### Index:
- **Y80.-** Anaesthetic General

#### Tabular:
- **Y80.9** Unspecified
- anticoagulant use (current) (long-term) Z92.1  
- use of medicaments (current) (long-term) NEC Z92.2  
- - anticoagulants Z92.1  
  Or  

**Long**  
- term use (current) of  
- - anticoagulants Z92.1  
  Or  

**Use (of)**  
- anticoagulant for a long term (current) Z92.1  

**Tabular:**  
Z92.1 Personal history of long-term (current) use of anticoagulants
Case Study Number 3 [26 Marks]

<table>
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<tr>
<th>Specialty</th>
<th>General Medicine</th>
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<tbody>
<tr>
<td>Consultant</td>
<td>Dr Ashworth</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>24th July 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>15th August 2016</td>
</tr>
<tr>
<td>Reason for Admission</td>
<td>Patient was admitted with a feeling of pressure in the chest, breathlessness and oedema. The patient had been discharged two weeks ago following a three day admission for a myocardial infarction.</td>
</tr>
<tr>
<td>Episode Summary</td>
<td>A chest X-ray and electrocardiogram (ECG) gave a diagnosis of left ventricular failure. As the patient was known to have chronic kidney disease, stage 3 (CKD3) it was decided to give IV fluids to prevent acute renal failure. The heart function continued to deteriorate to congestive cardiac failure (CCF). This resulted in the patient going into type 2 respiratory failure. Furosemide was prescribed but this did not improve the function. A CT chest, abdomen and pelvis with pre and post contrast was carried out to investigate a possible infectious origin to the CCF, but the results were within normal limits.</td>
</tr>
<tr>
<td>Comments</td>
<td>The function eventually stabilised and the patient was discharged.</td>
</tr>
</tbody>
</table>

Case Study Number 3

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
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<td>1. U21.2</td>
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<td>2. Y97.1</td>
</tr>
<tr>
<td>3. N18.3</td>
<td>3. Y98.3</td>
</tr>
<tr>
<td>4. I24.9</td>
<td>4. Z92.4</td>
</tr>
<tr>
<td>5.</td>
<td>5. Z92.6</td>
</tr>
<tr>
<td>6.</td>
<td>6. O16.1</td>
</tr>
</tbody>
</table>

INDEX TRAILS AND TABULAR ENTRIES
**ICD-10**

**Index:**
- **Failure, failed**
  - cardiac (see also Failure, heart) I50.9
  - congestive (see also Failure, heart, congestive) I50.0
  - heart (acute) (sudden) (senile) I50.9
  - - congestive I50.0

**Tabular:**
- I50.0 Congestive heart failure

**Index:**
- **Disease, diseased** – see also Syndrome
  - kidney (functional) (pelvis) N28.9
  - - chronic N18.9
  - - - stage 3 N18.3

**Tabular:**
- N18.3 Chronic kidney disease, stage 3

**Index:**
- **Failure, failed**
  - respiration, respiratory J96.9

**Tabular:**
- J96.9 Respiratory failure, unspecified
  - 1 Type II [hypercapnic]

**Index:**
- **Disease, diseased** – see also Syndrome
  - heart (organic) I51.9
  - - ischemic (chronic or with a stated duration of over 4 weeks) I25.9
  - - - acute or with a stated duration of 4 weeks or less I24.9

**Tabular:**
- I24.9 Acute ischaemic heart disease, unspecified

**OPCS-4.7**

**Index:**
- U21.- Imaging Diagnostic NEC

**Tabular:**
- U21.2 Computed tomography NEC

**Note:** Use subsidiary codes to identify radiology with contrast (Y97), radiology procedures (Y98)

**Index:**
- Y97.- Contrast Radiology
  - Or
  - Y97.- Radiology Contrast

**Tabular:**
- Y97.1 Radiology with pre and post contrast

**Index:**
- Y98.- Radiology Procedures

**Tabular:**
- Y98.3 Radiology of three body areas (or 20-40 minutes)

**Index:**
- Z92.- Body Region site NEC

**Tabular:**
- Z92.4 Chest NEC

**Index:**
- Z92.- Body Region site NEC

**Tabular:**
- Z92.6 Abdomen NEC

**Index:**
- Z92.- Body Region site NEC

**Tabular:**
- O16.1 Pelvis NEC
Case Study Number 4 [16 Marks]

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Obstetrics</th>
</tr>
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<tbody>
<tr>
<td>Consultant</td>
<td>Mr Chang</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>14th April 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>16th April 2016</td>
</tr>
<tr>
<td>Episode Summary</td>
<td>Admitted at 38+2 weeks with a spontaneous rupture of membranes. On examination the patient was not currently in labour. Admitted onto the labour ward and a prostaglandin pessary inserted into the vagina to induce labour. Labour commenced after two hours and slowly progressed. After 12 hours the patient was at 8cm dilated and it was decided a syntocinon (oxytocin) infusion would be started. Two hours later the patient was 10cm dilated, however, after active pushing for more than an hour there was no movement. It was decided to carry out a ventouse (vacuum) delivery due to a prolonged second stage of labour.</td>
</tr>
<tr>
<td>Procedure</td>
<td>A ventouse delivery was attempted twice but the cup kept falling off. Foetal CTG was within normal limits but it was decided to carry out a forceps delivery to expedite the delivery. An episiotomy was performed and a successful mid-forceps delivery was carried out.</td>
</tr>
<tr>
<td>After Care and Discharge</td>
<td>The episiotomy was sutured. The patient suffered 550mls of blood loss. Mother and baby both recovered well and were discharged.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. O63.1</td>
<td>1. R21.4</td>
</tr>
<tr>
<td>2. Z37.0</td>
<td>2. R27.1</td>
</tr>
<tr>
<td>3. O42.0</td>
<td>3. R15.1</td>
</tr>
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</table>
### INDEX TRAILS AND TABULAR ENTRIES

<table>
<thead>
<tr>
<th>ICD-10 Index</th>
<th>OPCS-4.7 Index</th>
</tr>
</thead>
</table>
| **Delivery (single)** O80.9  
- complicated (by) O75.9  
- - prolonged labor O63.9  
- - - second stage O63.1  
Or **Labor (see also Delivery)**  
- prolonged or protracted O63.9  
- - second stage O63.1  
Or **Long**  
- labor O63.9  
- - second stage O63.1  
Or **Prolonged**  
- labor O63.9  
- - second stage O63.1  
**Tabular:**
- O63.1 Prolonged second stage (of labour)

**Index:**
- Outcome of delivery Z37.9  
- single Z37.9  
- - liveborn Z37.0  
**Tabular:**
- Z37.0 Single live birth

**Index:**
- Rupture, ruptured
  - membranes (spontaneous)
  - - premature O42.9  
  - - - onset of labor  
  - - - - within 24 hours O42.0  
**Tabular:**
- O42.0 Premature rupture of membranes, onset of labour within 24 hours

**Or**

**OPCS-4.7 Index:**
- R21.- Cephalic Delivery Forceps  
  Or **R21.- Delivery Cephalic Forceps**  
**Tabular:**
- R21.4 Mid forceps cephalic delivery NEC

**Index:**
- R27.1 Episiotomy Delivery  
  Or **R27.- Delivery Facilitated NEC**  
**Tabular:**
- R27.1 Episiotomy to facilitate delivery

**Index:**
- R15.1 Induction Labour Medical  
  Or **R15.- Induction Labour NEC**  
  Or **R15.1 Induction Labour Oxytocin**  
  Or **R15.1 Induction Labour Prostaglandin**  
**Tabular:**
- R15.1 Medical induction of labour
### Case Study Number 5 [25 Marks]

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Orthopaedics</th>
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<tbody>
<tr>
<td>Consultant</td>
<td>Mr Kinsella</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>6th June 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>22nd June 2016</td>
</tr>
<tr>
<td><strong>Episode Summary</strong></td>
<td>Patient attended the Emergency Department following a fall down a step at home, falling onto her right side. She was experiencing pain in her hip and had quite a large, but superficial, laceration on her elbow. Her laceration was sutured in the Emergency Department while waiting to be taken to X-ray. The X-ray demonstrated a fractured hip. It was decided to admit the patient. She has osteoporosis, so it was decided the best course of action would be a total hip replacement.</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td>Intertrochanteric femur fracture – right hip.</td>
</tr>
<tr>
<td><strong>Co-morbidities</strong></td>
<td>Osteoporosis – affecting all limbs.</td>
</tr>
<tr>
<td><strong>Procedure</strong></td>
<td>An eight inch incision was made over the side of the hip through the muscles. The femoral head was cut, retracted and removed. The femoral shaft was drilled to allow the femoral stem component to be fit. The acetabulum was reamed to fit the cup. All components fit using cement. The joint prosthesis was carefully rotated to ensure adequate movement and the incised muscle and overlying skin sutured.</td>
</tr>
<tr>
<td><strong>Management / Treatment</strong></td>
<td>The patient was found to be in urinary retention two days after the procedure and was catheterised. Output was monitored and a trial without catheter was carried out three days following, which was successful. Discharged on 22nd June with an Outpatients follow up appointment.</td>
</tr>
</tbody>
</table>
## Case Study Number 5

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
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</thead>
<tbody>
<tr>
<td>1. S72.10</td>
<td>1. W37.1</td>
</tr>
<tr>
<td>2. S51.0</td>
<td>2. Z94.2</td>
</tr>
<tr>
<td>3. W10.0</td>
<td>3. M47.9</td>
</tr>
<tr>
<td>4. M81.90</td>
<td>4. M47.3</td>
</tr>
<tr>
<td>5. R33.X</td>
<td>5.</td>
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</tbody>
</table>

### INDEX TRAILS AND TABULAR ENTRIES

#### ICD-10

**Index:**
- Fracture (abduction) (adduction) (avulsion) (comminuted) (compression) (dislocation) (oblique) (separation) T14.2
  - femur, femoral S72.9
  - - intertrochanteric S72.1

**Tabular:**
- S72.1 Pertrochanteric fracture
  - 0 closed

**Index:**
- Laceration (see also Wound, open) T14.1

**Wound, open (animal bite) (cut) (laceration) (puncture wound) (shot wound) (with penetrating foreign body) T14.1**
- elbow S51.0

**Tabular:**
- S51.0 Open wound of elbow

**Index:**
- Fall, falling (accidental) W19
  - down
  - - stairs, steps (involving ice or snow) W10

**Tabular:**
- W10 Fall on and from stairs and steps
- .0 Home

#### OPCS-4.7

**Index:**
- W37.1 - Replacement Joint Hip Prosthetic Total Cemented

**Tabular:**
- W37.1 Primary total prosthetic replacement of hip joint using cement

**Index:**
- Z94.- Laterality Operations
  - Or
- Z94.- Operations Laterality
  - Or
- Z94.2 Operations Right Sided
  - Or
- Z94.2 Right Sided Operations

**Tabular:**
- Z94.2 Right sided operation

**Index:**
- M47.- Catheterisation Bladder Urethral

**Tabular:**
- M47.9 Unspecified urethral catheterisation of bladder

**Index:**
- M47.- Catheterisation Bladder Urethral

**Tabular:**
- M47.3 Removal of urethral catheter from bladder
### Index:
- **Osteoporosis** M81.9

### Tabular:
- M81.9 Osteoporosis, unspecified
- 0 Multiple sites

### Index:
- **Retention, retained**
  - urine R33

Or

### Urine
- retention or stasis R33

### Tabular:
- R33 Retention of urine
Case Study Number 6 [22 Marks]

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Gastroenterology</th>
</tr>
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<tbody>
<tr>
<td>Consultant</td>
<td>Miss Melberg</td>
</tr>
<tr>
<td>Date of Admission</td>
<td>19&lt;sup&gt;th&lt;/sup&gt; May 2016</td>
</tr>
<tr>
<td>Date of Discharge</td>
<td>13&lt;sup&gt;th&lt;/sup&gt; June 2016</td>
</tr>
<tr>
<td>History</td>
<td>This 82 year old patient has a seven day history of constipation, which is unusual for him. Attended today because the accompanying abdominal pain was now severe.</td>
</tr>
<tr>
<td>Co-morbidities</td>
<td>Rheumatoid arthritis of multiple sites – both hands and cervical spine.</td>
</tr>
<tr>
<td>Admission Details</td>
<td>Following admission the patient had an ultrasound, which did not present any obvious problem. However, an X-ray was performed that indicated a bowel obstruction in the jejunum. The decision was made to perform a laparoscopy.</td>
</tr>
<tr>
<td>Procedure</td>
<td>Excision of intussusception of jejunum</td>
</tr>
<tr>
<td></td>
<td>A diagnostic laparoscopy was performed to establish the severity of the bowel obstruction. A portion of the jejunum had telescoped and a decision was made to excise the obstruction.</td>
</tr>
<tr>
<td></td>
<td>Using the laparoscope the obstructed jejunum was excised and the exposed ends of the jejunum were anastomosed. The anastomosis was unclamped and there were no signs of leakage.</td>
</tr>
<tr>
<td></td>
<td>The laparoscope was withdrawn and the incisions sutured.</td>
</tr>
<tr>
<td>Postoperative Care</td>
<td>Patient continued to deteriorate following the procedure. He developed postoperative pneumonia following the excision and was commenced on Tazocin antibiotics. It appeared that the patient would not recover resulting in the Specialised Palliative Care team providing additional care (8&lt;sup&gt;th&lt;/sup&gt;, 10&lt;sup&gt;th&lt;/sup&gt;, 12&lt;sup&gt;th&lt;/sup&gt; June). Notification of death was made on 13&lt;sup&gt;th&lt;/sup&gt; June.</td>
</tr>
</tbody>
</table>
Case Study Number 6

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. K56.1</td>
<td>1. G58.4</td>
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<tr>
<td>2. J18.9</td>
<td>2. Y75.2</td>
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<tr>
<td>3. Y83.6</td>
<td>3.</td>
</tr>
<tr>
<td>4. M06.94</td>
<td>4.</td>
</tr>
<tr>
<td>5. M45.X2</td>
<td>5.</td>
</tr>
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</table>

**INDEX TRAILS AND TABULAR ENTRIES**

**ICD-10**

**Index:**
- Intussusception (bowel) (colon) (intestine) (rectum) K56.1
  - Or

**Telescoped bowel or intestine** *(see also)* Intussusception K56.1

**Tabular:**
- K56.1 Intussusception

**Index:**
- Pneumonia (acute) (double) (migratory) (purulent) (septic) (unresolved) J18.9

**Tabular:**
- J18.9 Pneumonia, unspecified

**Index:**
- Complication (delayed) (of or following) (medical or surgical procedure) Y84.9
  - removal of organ (partial) (total) NEC Y83.6

**Tabular:**
- Y83.6 Removal of other organ (partial) (total)

**Index:**
- Arthritis, arthritic (acute) (chronic) (subacute) M13.9
  - rheumatoid M06.9

**OPCS-4.7**

**Index:**
- G58.- Excision Jejunum
  - Or
- G58.- Jeunectomy
  - Or
- G58.- Anastomosis Jejunum & Excision Jejunum

**Tabular:**
- G58.4 Partial jejunecotomy and anastomosis of jejunum to ileum
  - Includes: Jejunectomy and anastomosis of jejunum to jejunum

**Index:**
- Y75.2 Approach Abdominal Cavity Laparoscopic NEC

**Tabular:**
- Y75.2 Laparoscopic approach to abdominal cavity NEC
Or
Rheumatoid – see also condition
- arthritis M06.9

**Tabular:**
M06.9 Rheumatoid arthritis,
unspecified
4 Hand

**Index:**
Arthritis, arthritic (acute) (chronic)
(subacute) M13.9
- rheumatoid M06.9
- - spine M45

Or
Arthritis, arthritic (acute) (chronic)
(subacute) M13.9
- spine M46.9
- - rheumatoid M45

**Tabular:**
M45 Ankylosing spondylitis
2 Cervical region

**Index:**
Palliative care Z51.5

Or
Care (of) (for) (following)
- palliative Z51.5

**Tabular:**
Z51.5 Palliative care
Case Study Number 7 [25 Marks]

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Vascular Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>Mr Samson</td>
</tr>
<tr>
<td>Admission Date</td>
<td>13th July 2016</td>
</tr>
<tr>
<td>Discharge Date</td>
<td>18th July 2016</td>
</tr>
</tbody>
</table>

**Episode Summary**
Admitted as an emergency with symptoms of an aortic aneurysm. An ultrasound was performed that showed aortic atherosclerosis and a dissecting abdominal aortic aneurysm. The decision was made to take the patient immediately to theatre for a stent graft of the affected area.

**Co-morbidities**
Chronic obstructive pulmonary disease, chronic kidney disease stage 2 due to hypertension.

**Treatment**
The patient underwent a transluminal stent graft insertion of the abdominal aortic aneurysm. A fenestrated stent graft was inserted via surgical cut-down under fluoroscopy control. The positioning was reviewed and established to be stable. The artery was closed by suture, as was the skin incision.

**Discharge**
The patient recovered well and was discharged.

### ICD-10 Codes and OPCS-4.7 Codes

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>OPCS-4.7 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I71.0</td>
<td>L27.4</td>
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<tr>
<td>I70.00</td>
<td>O20.2</td>
</tr>
<tr>
<td>J44.9</td>
<td>Y78.1</td>
</tr>
<tr>
<td>N18.2</td>
<td>Z34.7</td>
</tr>
<tr>
<td>I12.9</td>
<td></td>
</tr>
</tbody>
</table>

### INDEX TRAILS AND TABULAR ENTRIES

<table>
<thead>
<tr>
<th>ICD-10 Index:</th>
<th>OPCS-4.7 Index:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aneurysm (anastomotic) (artery) (cirsoid) (diffuse) (false) (fusiform) (multiple) (saccular) I72.9</td>
<td>L27.- Insertion Aorta Aneurysmal Stent Graft Endovascular</td>
</tr>
<tr>
<td>- aorta, aortic (nonsyphilitic) I71.9</td>
<td>Tabular:</td>
</tr>
<tr>
<td>- dissecting (any part) (ruptured) I71.0</td>
<td>L27.4 Endovascular insertion of stent graft for aortic dissection in any position</td>
</tr>
</tbody>
</table>
Or
Aneurysm (anastomotic) (artery) (cirsoid) (diffuse) (false) (fusiform) (multiple) (saccular) I72.9
- abdominal (aorta) I71.4
- - dissecting (ruptured) I71.0

Or
Aneurysm (anastomotic) (artery) (cirsoid) (diffuse) (false) (fusiform) (multiple) (saccular) I72.9
- dissecting  
  (see also Dissection, artery) I72.9
- - aorta (any part) (ruptured) I71.0

Dissection
- aorta (any part) (ruptured) I71.0

Tabular:
I71.0 Dissection of aorta [any part]

Index:
Atherosclerosis – see Arteriosclerosis

Arteriosclerosis, arteriosclerotic (diffuse) (disease) (general) (obliterans) (senile) (with calcification) I70.9
- aorta I70.0

Tabular:
I70.0 Atherosclerosis of aorta 0 without gangrene

Index:
Disease, diseased – see also Syndrome
- lung J98.4
- - obstructive (chronic) J44.9

Or
Obstruction, obstructed, obstructive
- airway J98.8
- - chronic J44.9

Or
Obstruction, obstructed, obstructive
- lung J98.4

Index:
O20.2 Placement Stent Graft Fenestrated One Endovascular (L)

Tabular:
O20.2 Endovascular placement of one fenestrated stent graft

Index:
Y78.- Approach Arteriotomy Image Control
Or
Y78.- Arteriotomy Approach Image Control

Tabular:
Y78.1 Arteriotomy approach to organ using image guidance with fluoroscopy

Index:
Z34.- Aorta site NEC

Tabular:
Z34.7 Abdominal aorta NEC
Disease, diseased – see also Syndrome
- airway, obstructive, chronic J44.9

**Tabular:**
J44.9 Chronic obstructive pulmonary disease, unspecified

**Index:**
Disease, diseased – see also Syndrome
- kidney (functional) (pelvis) N28.9
- chronic N18.9
- stage 2 N18.2

**Tabular:**
N18.2 Chronic kidney disease, stage 2

**Index:**
Hypertension, hypertensive (accelerated) (benign) (essential) (idiopathic) (malignant) (primary) (systemic) I10
- kidney I12.9

Or

Disease, diseased – see also Syndrome
- kidney (functional) (pelvis) N28.9
- hypertensive (see also Hypertension, kidney) I12.9

**Tabular:**
I12.9 Hypertensive renal disease without renal failure