

P10 Clinical microbiology I – general

To study: Sampling, specimen transport (from textbooks, www etc.)

From spring term: Microscopy

Task 1: Indications for microbiological examination

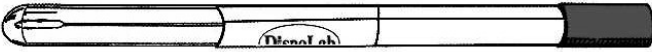
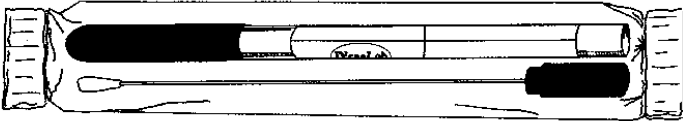
For following casuistries, fill in the table.

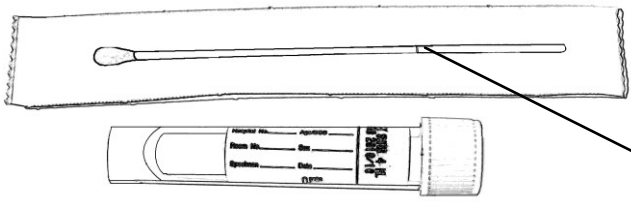
- ❶ Fill in always the case description (left column).
- ❷ Try to find out your solution. Try to structure your answer as follows:
 Microbiological examination: yes/no
 - ❖ **yes** → select a specimen
 - ❖ **no** → select other steps, e. g. direct treatment – what antibiotics etc.)
- ❸ After the three minute limit, write down a correction according to the teacher's explanation.

	Description of a case	Your solution (⌚ 3 minutes)	Correction according to the teacher's explanation
a			
b			
c			
d			

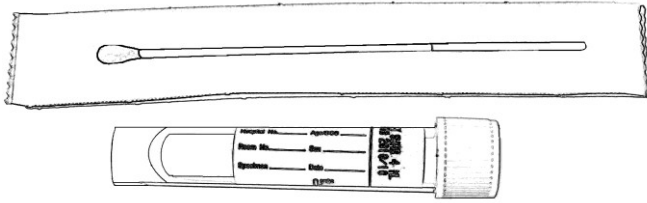
Task 2: Swabs and vessels

Observe the swabs in your table and fill in their "identity cards".

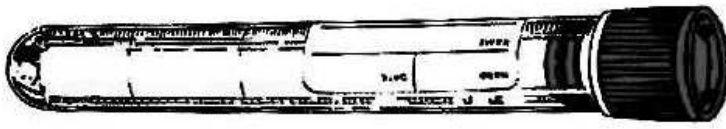
Name: Plain swab		
	Stick material	plastic, wood, aluminium
	Swab material	synthetic cotton
Practical use:		
Name: Swab with Amies transport medium		
	Stick material	plastic or aluminium
	Swab material	synthetic cotton
	Medium	Amies (Stuart, Cary Blair)
<i>Note: The medium may contain charcoal (then it is black); without charcoal, it would be colourless.</i>		
Practical use:		
Variant with aluminium stick is used for		

Name: Fungi-Quick swab		
	Stick material	plastic
	Transport medium colour	colourless
	Cap colour	

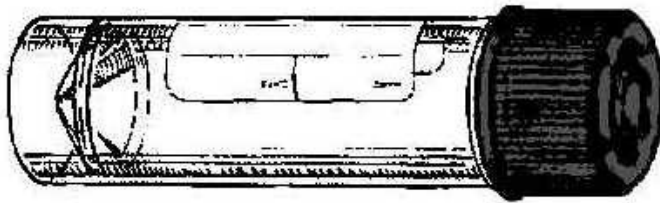
Practical use:

Name: C. A. T. swab		
	Stick material	plastic
	Transport medium colour	colourless
	Cap colour	

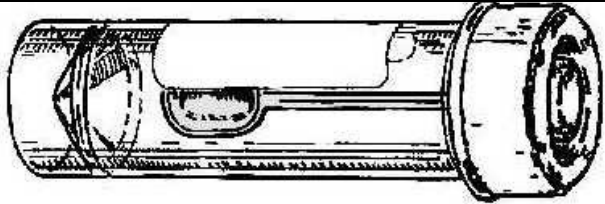
Practical use:

Name: Common test tube for microbiology		
	Sterile? (yes or no)	
	Description	made of polystyrene, 16 × 100 mm, 10 ml



Practical use:

Name: Sputum test tube		
	Sterile? (yes or no)	
	Description	made of polystyrene or polypropylene, 26 × 92 mm, 30 ml

Practical use:

Name: Stool container		
	Sterile? (yes or no)	
	Description	made of polypropylene, 26 × 82 mm, 30 ml

Practical use:

Name:		Sampling vessel for urine	
		Sterile? (yes or no)	
		Description	made of polypropylene, 45 × 70 mm, 120 ml
Practical use:			

Task 3: Other sampling methods than swabs and vessels

Fill in the following table:

Sampling method	Typical example(s) of use
smear on a slide	
imprint with an agar	
moulage method	
uricult	

Task 4: The order form

a) Filling in the order form

Fill in the following order form with a patient name and data and the requested examination related to the disease, according to a card that has been given to you by the teacher.

Kód pojišťovny	požaduje díl A	IČP	Datum	Čís. dokladu	Pof. č.
		Odbornost		provedl díl B	
POUKAZ NA VYŠETŘENÍ / OŠETŘENÍ					
Pacient					
Č. pojištěnce	Základní diagnóza				
Variabilní symbol	Ostatní diagnózy				
Odeslán ad:	Kód náhrady				
Požadováno:					
Poznámka:					
	Dne:				
	razítko a podpis lékaře				
	razítko a podpis				
VZP-06x/1999					

b) Order form common mistakes

To each of the following order forms write down what is wrong. There are some mistakes at filling in the order form, but you should also identify improperly requested examinations.

The image shows four examples of medical order forms for patient Albus Dumbledore, each with different errors:

- Top-left:** Requested examination: "wound swab". Errors: Missing patient ID, missing date, missing department.
- Top-right:** Requested examination: "tissue for microbiology". Errors: Missing patient ID, missing date, missing department.
- Bottom-left:** Requested examination: "rectal swab for parasitology". Errors: Missing patient ID, missing date, missing department.
- Bottom-right:** Requested examination: "Tissue for syphilis cultivation". Errors: Missing patient ID, missing date, missing department.

Task 5: Interpretation

a) Direct diagnostic interpretation

Using the table in the slideshow, write likely interpretation for thirteen various findings written on cards available on your table. Use terms "pathogen", "common flora", "accidental finding", "colonization" and "contamination"

Finding	Interpretation

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b) Indirect diagnostic interpretation

Interpret several clinical situations with data given on the card. Do not forget to make your interpretation on the base of both clinical findings and laboratory results (clinical findings)

Rewrite from the card (simplify the sentences)		Conclusion
Clinical situation	Serology examination results	

Notes (correction of your conclusion done by the teacher)