**Gynecology and Obstetrics State Examination (SRZ) - aVLPG11XX**

**Academic year 2020-2021**

***Wednesday 11.00 - 15.30 hours,***

***University Campus Bohunice, Kamenice 753/5, 625 00 Brno - building A15, Room No.332 (3rd floor)***

## Organizational instructions

Gynecology and Obstetrics State Examination (SRZ) consists of a practical part, a theoretical part and an online test. At the beginning a proof of study is required (study “index” or ISIC card). Each student also submits proofs of practical training passed - completed “attendance card” and “logbook” of practical skills. Students will also need stationery and their own laptop or mobile device with Internet access.

Each student draws a combination of questions that is randomly generated by a computer. The practical part of the exam takes place without the need for preparation time and includes the answer to one practical question with an emphasis on the knowledge and skills acquired during internship at the department.

During the theoretical part of the exam, the student answers three questions from three areas: gynecology, obstetrics and gynecologic oncology. Before the exam, students have the opportunity for a short written preparation. It is recommended to prepare only a brief summary of each question, so that the student's own oral speech is factual and fluent. With students’ borderline knowledge, the examiner has the opportunity to ask additional questions from the relevant subject area.

The online test is accessed via the is.muni.cz environment on individual laptops/mobile device with internet access and the potential to use hospital guest Wi-Fi. Exam contains 40 questions that are generated individually for each student. Only one answer is correct, and the time limit is 30 minutes. To successfully pass the examination, it is necessary to answer more than 67% of the questions correctly.

# Questions – practical part

1. History taking in gynecology and obstetrics
2. Antenatal care – obstetric examination, care schedule, obstetric examination record
3. Prenatal screening tests: non-invasive and invasive
4. Vaginal delivery and labor – initial examination, mother and fetal monitoring, partogram use
5. Cardiotocography, ST analysis
6. Surgeries and instruments in pregnancy - evacuation of the uterus, surgical abortion
7. Surgeries and instruments during labor- forceps, VEX, placenta manual extraction, analgesia
8. Pelvic examination in gynecology
9. Examination for genital infections, vaginal discharge, infections of the vulva and vagina
10. Urogynecology examination, surgeries in urogynecology
11. Investigation of the infertile couple, treatment plan, semen analysis
12. Pediatric gynecology examination, pubertal development, vaginal smear test
13. Gynecologic oncology - ultrasound, clinical staging, breast cancer imaging
14. Pelvic ultrasound in gynecology
15. Ultrasound scans in pregnancy, dopplerometry
16. Cervical and vaginal cytology, HPV testing and vaccination
17. Colposcopy
18. Small gynecological surgeries and instruments -excision, biopsy, endometrial ablation, hysteroscopy
19. Laparoscopic gynecological surgeries and instruments
20. Abdominal gynecological surgeries and instruments

# Questions –theoretical part

**Area- gynecology**

1. Therapeutic abortion (termination of pregnancy)
2. Ectopic pregnancy
3. Miscarriage, recurrent pregnancy loss
4. Contraception
5. Pediatric gynecology and disorders of sex development
6. Endocrine control of the menstrual cycle
7. Menstrual cycle disorders - amenorrhoea, heavy menstrual bleeding, dysmenorrhea and pre-menstrual syndrome
8. Endocrine syndromes in gynecology
9. Female genital tract congenital malformations
10. Pelvic organ prolapse
11. Infections of the vulva and vagina
12. Pelvic inflammatory disease
13. Endometriosis
14. Uterine fibroids
15. Causes and investigation of infertility
16. Infertility and recurrent pregnancy loss
17. Assisted conception techniques
18. Female urinary incontinence
19. The menopause and hormone replacement therapy
20. Gynecological emergencies
21. Chronic pelvic pain

**Area- obstetrics**

1. Pregnancy diagnosis, signs and symptoms of pregnancy
2. Human embryology – implantation, germ layers formation, organogenesis
3. Placenta, fetal membranes, amniotic fluid, umbilical cord, fetal circulation
4. Maternal physiological changes in pregnancy
5. Fetal lie, attitude, presentation, position and station, fetal malpresentation
6. Birth canal, pelvic planes, fetal head dimensions, powers of labor
7. The mechanism of labour, stages of labour, management of normal labour
8. Postnatal care, postnatal problems
9. Pre-term labour
10. Prolonged pregnancy
11. Alloimmunization in pregnancy
12. Hypertension in pregnancy
13. Pre-eclampsia
14. HELLP syndrome
15. Diabetes in pregnancy
16. Infections in pregnancy (syphilis, toxoplasmosis, rubella, CMV, HSV, varicella)
17. Prenatal diagnosis for congenital malformations
18. Fetal intrauterine growth restriction (IUGR)
19. Multiple pregnancy
20. Placental pathologies (abruption, abnormally invasive placenta)
21. Breech presentation, modes of delivery
22. Shoulder dystocia
23. Perineal and vaginal tears, uterine rupture
24. Peripartum hemorrhage
25. Induction of labour
26. Operative vaginal deliveries (VEX, forceps)
27. Cesarean section
28. Fetal monitoring fetal hypoxia
29. Intrauterine fetal death and stillbirth – cause, diagnosis, management
30. Labour analgesia
31. Premature rupture of membranes

**Area-gynecologic oncology**

1. Vulvar and vaginal precancerous conditions
2. Vulvar and vaginal neoplasia
3. Uterine precancerous lesions - cervical, endometrial
4. Cervical neoplasia
5. Uterine neoplasia
6. Ovarian carcinoma, primary tubal and peritoneal carcinoma
7. Non-epithelial ovarian neoplasms
8. Breast cancer
9. Pediatric gynecologic cancer
10. Gestational trophoblastic disease
11. Gynecologic cancer in pregnancy
12. Sentinel lymph node concept in gynecologic oncology
13. Fertility sparing treatments in gynecologic cancers
14. Surgical risks and complications in gynecologic oncology
15. Non-surgical treatment in gynecologic oncology (radiotherapy, chemotherapy , hormonal therapy)
16. Hereditary gynecologic cancer syndromes

# Recommended literature

1. Thomson A, Owen P, Magowan B. Clinical Obstetrics and Gynaecology - 4th Edition, Elsevier, 2019, 416 pages, ISBN: 9780702074042, eBook ISBN: 9780702074073
2. Symonds I, Arulkumaran S. Essential Obstetrics and Gynaecology - 6th Edition, Elsevier, 2020, 480 pages, ISBN: 9780702076381, eBook ISBN: 9780702076411

Supplementary resources

<http://portal.med.muni.cz/index-en.php>

<http://www.ivfbrno.cz/en/>

<https://opti.med.muni.cz/en/>

<https://www.mefanet.cz/index-en.php>

prof. MUDr. Martin Huser, Ph.D., MBA doc. MUDr. Vít Weinberger, Ph.D.
deputy department head for education department head