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Total Number of Pages 16

B.V.Sc. & A.H. (Fourth Professional) Examination – 2023

Veterinary Gynaecology and Obstetrics Paper-II

(MSVE 2016)

To be filled by the candidate:

Candidate's Roll Number:

In figure

In words

Candidate's Enrolment Number:

Day and date of examination:

Please see for general instructions overleaf.

Signatures of invigilators verifying the details filled by the candidate

Signature of invigilator 1: 2:

Candidate should not write anything below this line

Marks to be filled by the examiner:

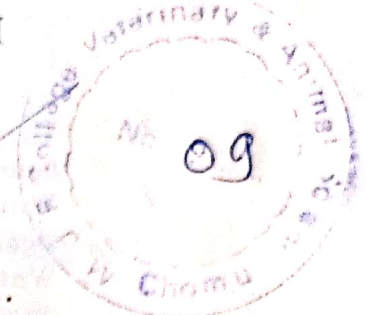
Section A	
Q. No.	Marks
1.	
2.	
3.	
4.	
5.	
Total	

Total Marks obtained:

In figures: In words:

Signature of examiner:

Donot write across this line



for [Handwritten signature]

INSTRUCTIONS TO THE CANDIDATES

1. The invigilator and the members of the Flying Squad are empowered to take search of the examinees during the examinations.
2. Candidate should read the question paper and the instructions carefully before they begin to write answers.
3. The candidate will not be allowed to leave the examination hall before one hour from the end of the examination time.
4. Write on the cover page all the required entries correctly and get the signature of the invigilators.
5. Write legibly in the space provided for answer of each questions/sub-questions according to instruction given in the question paper booklet (question paper).
6. Do not write your name on any part of the question paper / answer booklet.
7. Do not leave examination hall without handing over question paper / answer booklet to the invigilator incharge.
8. No leaves should be torn out of the question paper / answer booklet.
9. Candidate attempting to use unfair means or talking to one another will be dealt with severely as per unfair means rules.
10. No written paper or book notes etc. should be brought to examination hall.
11. Total number of pages of question paper / answer booklet be checked before writing.
12. Candidate should not bring in any article other than pens and admit card. Use of Mobiles, calculators on any other electronic device in the examination hall is strictly prohibited.

SPACE FOR ROUGH WORK

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B.V.Sc. & A.H. (Fourth Professional) Examination – 2023
Veterinary Gynaecology and Obstetrics Paper-II

Time: Three Hours

Maximum Marks: 100
Weightage: 20

Unit-2 (Veterinary Obstetrics)

Unit-3 (Veterinary Andrology and A.I.)

Instructions:

- 1) Attempt all questions
- 2) Answer of all questions is to be written in the space provided along with the question in question-booklet.
- 3) Overwriting is not allowed in the objective type question.

Q.1 Fill in the blanks.

(20x0.5 = 10)

- 1.1migration of embryo is important for maternal recognition of pregnancy in mare.
- 1.2, is a metabolic disease of dairy cows characterised by acute disturbance in calcium metabolism that occur just before, during or within 72 hours of parturition.
- 1.3 Slipping of the fetal membranes in cow is best performed fromof gestation.
- 1.4 In ruminants, (portion of maternal placenta) and cotyledons (portion of allantois chorion) closely appose each other to form placentomes.
- 1.5 Corpus luteum of pregnancy is termed as
- 1.6 Fetal mummification in cattle is type.
- 1.7 *Brucella abortus* causes abortion during of pregnancy in cattle.
- 1.8 Vibriosis is transmitted (route).
- 1.9 Prolapse or eversion of uterus is also called
- 1.10 Erection is aautonomic nerve pathway.
- 1.11 Scrotal skin is richly endowed with sweat glands andmuscle which help in thermoregulation of the testis.
- 1.12 Release of spermatozoa into the lumen of seminiferous tubules is known as

- 1.13 Acrosome in the spermatozoa contains acrosin,
and other hydrolytic enzymes.
- 1.14 The middle piece of spermatozoa composed of
arrangement of microtubules.
- 1.15 Binucleate cells of the trophoblast are involved in immunologic protection and
transfer of into maternal blood circulation
- 1.16 Functional maturation of spermatozoa takes place in the
.....
- 1.17 muscle in ruminants and pig control the
effective length of penis.
- 1.18 Excrete large amount of estrogens in stallions is produced from the
.....
- 1.19 Colonization of sperm occurs into in the
reproductive tract of ewe.
- 1.20 Male sexual behaviour reflected as extended neck and upward curling of upper
lip following sniffing of female genitalia and urine is called

**Q.2 Choose the most suitable answer and write the number of the correct answer
1 or 2 or 3 or 4 in the space given against each sub question: (20x0.5 = 10)**

- 2.1 Zonary type of placenta is present in one of the following ()
1. Cow
2. Sow
3. Bitch
4. Rodents
- 2.2 The preferred drug used for induction of parturition in mares ()
1. Cortisol
2. PGF2 alpha and its analogue
3. Oxytocin
4. Estrogen
- 2.3 Time of maternal recognition of pregnancy in sow is ()
1. 12th Day
2. 14th to 16th Day
3. 16th to 17th Day
4. 18th Day
- 2.4 In mares, highest level of eCG reaches at ()
1. 38-42 days after ovulation
2. 60-65 days after ovulation
3. 120-150 days after ovulation
4. 150 days onwards after ovulation

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- 2.5 Earliest time to palpate the placentomes in a pregnant cow is ()
1. 60 days
 2. 80 days
 3. 105 days
 4. 120 days
- 2.6 Ejaculate volume in Ram ()
1. 0.8-1.2 ml
 2. 5-8 ml
 3. 60-100 ml
 4. 150-200 ml
- 2.7 Site of ejaculate deposition in pig ()
1. Into Cranial end of vagina
 2. Onto cervix
 3. Into relaxed cervical canal
 4. Into uterus
- 2.8 Fertile life span of spermatozoa in the female genital tract of mare is ()
1. 24- 30 hours
 2. 30- 48 hours
 3. 48-72 hours
 4. 72-120 hours
- 2.9 Which one is the only accessory sex gland present in all mammals ()
1. Ampulla
 2. Bulbourethral
 3. Prostate
 4. Seminal vesicle
- 2.10 Mullerian inhibiting substance is responsible for suppression of ()
1. Mesonephric duct
 2. Paramesonephric duct
 3. Fetal androgen
 4. Descent of the testis
- 2.11 Inhibin is produced from the ()
1. Cuboidal cells
 2. Spermatogonia cells
 3. Leydig cells
 4. Sertoli cells
- 2.12 Temperature of lumen in the artificial vagina for bull at the time of collection should be ()
1. 50-55 °C
 2. 45-48 °C
 3. 40-42 °C
 4. 38-40 °C
- 2.13 The preferred method should be for semen collection in wild animals ()
1. Digital manipulation
 2. Artificial vagina
 3. Electroejaculation
 4. Dummy fitted with Artificial vagina

- 2.14 Mutation does not include ()
1. Repulsion
2. Version
3. Adjustment of extremities
4. Forced traction
- 2.15 Which of the following is most important condition for an artificial vagina to collect the ejaculate in a bull ()
1. Pressure
2. Temperature
3. Lubrication
4. Weight
- 2.16 Artificial insemination (AI) in a mare is done by using ()
1. AI gun with trans-vaginal approach
2. Flexible catheter with trans-rectal approach
3. Flexible catheter with trans-vaginal approach
4. Syringe with surgical approach
- 2.17 Puberty in bull is considered when first ejaculate contains ()
1. 10 million sperm with 10% progressive motility
2. 50 million sperm with 10% progressive motility
3. 10 million sperm with 50% progressive motility
4. 50 million sperm with 50% progressive motility
- 2.18 Sodium citrate dihydrate content (per 100 ml) in egg yolk citrate extender is ()
1. 100 mg per 100 ml
2. 3.028 gm per 100 ml
3. 1.25 gm per 100 ml
4. 2.9 gm per 100 ml
- 2.19 Increased sperm concentration in a semen samples refers to ()
1. Polyzoospermia
2. Hyperspermia
3. Hypospermia
4. Oligozoospermia
- 2.20 Ultrasound transducer frequency for pregnancy diagnosis in small animals ()
1. 3.0-5.0 MHz
2. 3.5-5.0 MHz
3. 5.0-7.5 MHz
4. 7.5-10 MHz

Q.3 Attempt any ten out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (10x2.0= 20)

3.1 What is schistosomus reflexus condition?

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3.2 Explain transuterine migration of zygote/embryo with example.

3.3 Define superfetation.

3.4 What is a dog sitting posture of the fetus?

3.5 Why ectopic pregnancy in sow can be invasive?

3.6 Clarify the role of estrogen produced by the swine blastocyst.

3.7 Describe high flanker condition in a male?

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3.8 Define version, an obstetrical operation with example.

3.9 Mention the purpose to perform Caslick's operation.

3.10 Convey about emission and how it occurs in male animals?

3.11 Elucidate thawing of semen and how it is achieved?

3.12 Why egg yolk is added in the semen extender?

Q.4 Attempt any six out of the following eight questions. Answer of each question should be in 8 to 10 lines. (6 x 6.0 = 36)

4.1 How pyometra condition is differentiated from pregnancy in a cow?

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4.2 Describe the different roles of placenta?

4.3 What are the events that take place during first stage of parturition in a cow?

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4.4 Mention about the stages of spermatozoa transport in female reproductive tract of ewe.

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4.5 Enumerate maternal causes of dystocia.

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4.6 Describe the various developmental stages of spermatid transformation.

4.7 Clarify the components of blood testis barrier and its role.

4.8 Enlist the structural components of penis in a boar.

Q.5 Answer the following question in 1-2 pages (attempt any two). (2x12.0 = 24)

- 5.1 Write the possible causes, diagnosis and procedure to correct right side post-cervical uterine torsion using non-surgical method in a 7.5 months pregnant buffalo. (2+4+6)
- 5.2 Describe the conditions of retained placenta with etiology, sequelae and treatment. (4+2+6)
- 5.3 Give details about the categories of male infertility, causes and treatment of anyone condition. (4+4+4)