

**Domain Knowledge Test for recruitment of Assistant Professor in DUVASU, Mathura**

**Subject: Veterinary Gynaecology and Obstetrics**

- Q. No. 1** 2<sup>nd</sup> stage of parturition is shortest in
- Mare
  - Sow
  - Bitch
  - Cat
- Q. No. 2** Which muscle layer is not incised while performing CS by left flank approach
- External abdominis Oblique
  - Rectus abdominis
  - Internal abdominis Oblique
  - Transverses abdominis
- Q. No. 3** Digital stimulation of vagina in bitch to induce oxytocin release and uterine contraction is
- Weathering
  - Feathering
  - Massaging
  - Leathering
- Q. No. 4** Pygopagus conjoined twins are joined at
- Thorax
  - Ischium
  - Ventral abdomen
  - Sacrum
- Q. No. 5** Version is used to correct
- Presentation
  - position
  - Posture
  - None of the above
- Q. No. 6** Ring womb condition is observed in
- Sheep
  - Cow
  - Goat
  - Pig
- Q. No. 7** FSH and LH hormones are
- Steroid
  - Glycoprotein
  - Protein
  - Fatty acid

- Q. No. 8** **Bloated bull frog like condition is observed in**
- Fetal anasarca
  - Hydroallntois
  - Fetal ascitis
  - Hydroamnios
- Q. No. 9** **The pattern of microfibril arrangement from outside to inside in the tail of a sperm cell is**
- 9 + 9 + 2
  - 9 + 2 + 2
  - 2 + 2 + 9
  - 2 + 9 + 9
- Q. No. 10** **Two cell two gonadotropins model pertains to**
- Leydigs and sertoli cell
  - GnRH and LH
  - Theca interna and Theca externa
  - Estrogen an progestetrone
- Q. No. 11** **Jensen's ring in the sperm is located in the**
- At the junction of mid-piece and principle piece
  - Neck
  - Head
  - At the junction of principal - piece and end piece.
- Q. No. 12** **The proximal protoplasmic droplet in the spermatozoa is a remnant of**
- Nucleus
  - Golgi apparatus
  - Cytoplasm
  - Endoplasmic reticulum
- Q. No. 13** **Potato soup like pus is seen in**
- Brucellosis
  - Campylobacteriosis
  - Trichomoniasis
  - IBR-IPV
- Q. No. 14** **Sample to be taken for Cuboni test is**
- Urine
  - Blood
  - Vaginal secretions
  - Feaces

- Q. No. 15 bPSPB is produced by**
- Binucleate cells of trophoblastic ectoderm
  - uninucleate cells of trophoblastic ectoderm
  - Uninucleate cells of embryoblast ectoderm
  - Binucleate cells of embryoblast ectoderm
- Q. No. 16 Mifepristone is a**
- Progesterone receptor blocker
  - Progesterone receptor activator
  - Estrogen receptor blocker
  - Estrogen receptor activator
- Q. No. 17 Fetal heart beat in bitch by USG can be detected earliest at day**
- 32
  - 12
  - 22
  - 40
- Q. No. 18 Blood in form of dry, amber coloured and granule form on surface of placenta is called**
- Uterine sand
  - Hippomanes
  - Plaques
  - Cervical star
- Q. No. 19 Pseudopregnancy in cats is due to**
- Fall in P<sub>4</sub> level
  - Rise in P<sub>4</sub> level
  - Rise in prolactin level
  - Fall in prolactin level
- Q. No. 20 Stage of oocyte at ovulation in bitch is**
- Metaphase I
  - Prophase I
  - Metaphase II
  - Prophase II
- Q. No. 21 Non Surgical Embryo collection in buffalo during ETT is done on day**
- 7 post superovulatory estrus
  - 8 post superovulatory estrus
  - 9 post superovulatory estrus
  - 6 post superovulatory estrus

- Q. No. 22 Grams theory of adrenal virilism was based on increased level of**
- Estradiol  $17\beta$
  - 17-ketosteroids
  - Progesterone
  - Estradiol  $17\alpha$
- Q. No. 23 Parametritis is inflammation of**
- Uterine ligaments
  - Uterine serosa
  - Entire uterus
  - Uterine endometrium
- Q. No. 24 In IBR-IPV abortions is commonly caused by which clinical form of disease**
- Respiratory form
  - Intestinal form
  - Meningo-encephalitic form
  - Vulvo-vaginal form
- Q. No. 25 For inducing cyclicity in mare during out of season breeding light to darkness ratio should be**
- 10:14
  - 16:8
  - 14:10
  - 8:16
- Q. No. 26 There are \_\_\_\_\_ diameters of pelvic outlet**
- 6
  - 4
  - 2
  - 3
- Q. No. 27 Technique of fixation of cervix to prepubic tendon to treat CV prolapsed is termed as**
- Farquharsons technique
  - Minchev technique
  - Caslick technique
  - Winklers technique
- Q. No. 28 GnRH is**
- Decapeptide
  - Tetrapeptide
  - Dipeptide
  - Pentapeptide

- Q. No. 29** A new born orphan foal can be fed milk of the following due to nearly similar composition
- Human
  - Cow
  - Goat
  - Buffalo
- Q. No. 30** Duration of each cycle of seminiferous epithelium during spermatogenesis in bull is
- 12 days
  - 14 days
  - 9 days
  - 10 days
- Q. No. 31** During breeding soundness examination of bull the following gland can't be palpated
- Cowpers
  - Vesicular
  - Prostate
  - Ampulla
- Q. No. 32** In Neubauer chamber each primary square is divided into
- 25 tertiary square
  - 400 tertiary square
  - 50 secondary square
  - 400 secondary square
- Q. No. 33** One of the following pelvic ligaments complete the lateral wall of pelvic cavity in cattle
- Dorsal sacroiliac ligament
  - Lateral sacroiliac ligament
  - Sacrosciatic ligament
  - Pre-pubic tendon
- Q. No. 34** Disease not transmitted through semen is
- IBR-IPV
  - Black quarter
  - FMD
  - Trichomoniasis
- Q. No. 35** After about one of the following days of gestation, mare can be ovariectomized without causing abortion
- 110 days
  - 130 days
  - 150 days
  - 170 days

- Q. No. 36** Example of non-permeating cryoprotectant is
- Polyethylene glycol
  - Ethylene glycol
  - Propylene glycol
  - Glycerol
- Q. No. 37** First time semen was frozen at  $-79^{\circ}\text{C}$  by
- Polge
  - Ivanoff
  - L Spallanzani
  - none of the above
- Q. No. 38** Example of secondary sperm defect is
- pyriform head
  - Diadem defect
  - Presence of protoplasmic droplet
  - Knobbed acrosome
- Q. No. 39** Riglings term for cryptorchidism is used in
- Horse
  - Buck
  - Ram
  - Boar
- Q. No. 40** Medusa cells in ejaculate are seen in following condition
- Epididymitis
  - Testicular degeneration
  - Testicular hypoplasia
  - Orchitis
- Q. No. 41** Breeders bag for semen collection is used in
- Horse
  - Boar
  - Ram
  - Buck
- Q. No. 42** Diluter used for semen preservation at refrigeration temperature is
- Milovanov diluter
  - Coconut milk extender
  - D<sub>2</sub> dilutor
  - IVT dilutor
- Q. No. 43** The urethra in the glans of a cat is located
- Ventrally
  - Medially
  - Dorsally
  - Laterally

- Q. No. 44 Leutinization before ovulation occurs in**
- Bitch
  - Cow
  - Sheep
  - Swine
- Q. No. 45 Prolactin is luteotropic in**
- Cattle
  - Sheep
  - Swine
  - Ovine
- Q. No. 46 Life span of secondary spermatocyte in stallion is**
- Less than 1 day
  - More than 1 day
  - More than 5 day
  - Between 2 to 5 day
- Q. No. 47 Torsion of uterus is uncommon in mare due to**
- Laterally attached broad ligament
  - Ventrally attached broad ligament
  - Dorsally attached broad ligament
  - Ventro-Laterally attached broad ligament
- Q. No. 48 During recruitment of follicle there is**
- High FSH, Low LH, No inhibin and No E<sub>2</sub>
  - High FSH, High LH, No inhibin and No E<sub>2</sub>
  - High FSH, High LH, Low inhibin and No E<sub>2</sub>
  - Low FSH, Low LH, No inhibin and No E<sub>2</sub>
- Q. No. 49 Pore size of embryo filter used in embryo collection in cattle is**
- 100 μ
  - 120 μ
  - 150 μ
  - 70 μ
- Q. No. 50 Ductus arteriosus shunts takes away blood from**
- Right ventricle to left ventricle
  - Lungs to aorta
  - Liver to left atrium
  - Liver to Rightt atrium
- Q. No. 51 Placenta vera term is used in**
- Swine
  - Ovine
  - Primates
  - Equine

- Q. No. 52** Turning of fetus on its long axis to bring the fetus into dorso-sacral orlumbo-sacral position is termed as
- Version
  - Rotation
  - Mutation
  - Forced extraction
- Q. No. 53** Trachelectomy is done in cases of
- Cervicitis
  - Salpingitis
  - Vaginitis
  - Haemmoraghic Septicemia
- Q. No. 54** RU 486 is
- Misoprostol
  - Mifepristone
  - Aglepristone
  - Epostane
- Q. No. 55** Balanoposthitis is Ram is termed as
- Phallus rot
  - Pizzel rot
  - Rod rot
  - Prep rot
- Q. No. 56** Decreased sperm motility is termed as
- Asthenozoospermia
  - Necrozoospermia
  - Hypospermia
  - Oligozoospermia
- Q. No. 57** Pulsation at base of penis during semen ejaculation is seen in
- Horse
  - Cattle
  - Ram
  - Buck
- Q. No. 58** Example of fetotome is
- Roberts fetotome
  - Schottler fetotome
  - Utretch fetotome
  - Hollando fetotome



- Q. No. 59** Fructolysis index is amount of fructose utilized by \_\_\_\_\_ spermatozoa in 1 hr at 37 °C
- 10<sup>6</sup>
  - 10<sup>9</sup>
  - 10<sup>12</sup>
  - 10<sup>3</sup>
- Q. No. 60** Finestrade used to treat prostatic hyperplasia inhibits the following enzyme that converts Testosterone into Dihydrotestosterone
- 17 β hydroxylase
  - 5α reductase
  - 5α hydroxylase
  - 17 β reductase
- Q. No. 61** Surgical flushing of embryo towards uterotubal junction is preferred in
- Caprine
  - Ovine
  - Equine
  - Bovine
- Q. No. 62** AI in bitches is done
- 10-12 days after onset of proestrus bleeding
  - On the day of true estrus
  - 3-5 days after onset of proestrus bleeding
  - 10-12 days after onset of true estrus
- Q. No. 63** Example of Chimera is
- White heifer disease
  - Freemartin
  - Male hermaphrodite
  - Uterus unicornis
- Q. No. 64** Invasive method of sexing of embryo is
- Bio-electromagnetic field
  - immunological assay of HY antigen
  - Quantification of X linked enzyme
  - Y specific DNA probe
- Q. No. 65** Supplementation of one of the following in the media will prevent adhesion of the embryo to the plastic ware
- Heparin
  - BSA
  - Acrosin
  - Phosphate buffer

- Q. No. 66** The upper limit of genes that can be incorporated into retroviral genome to produce transgenic is
- 20 kb
  - 8 kb
  - 15 kb
  - 12 kb
- Q. No. 67** For induction of parturition in Swine the protocol containing\_\_\_ is best
- Estradiol + PGF<sub>2α</sub>
  - Dexamethasone
  - PGF<sub>2α</sub>
  - Misoprostol
- Q. No. 68** During slow freezing of embryos they are dipped in LN<sub>2</sub> when straw containing embryo has reached a temperature of
- 33°C
  - 79°C
  - 15°C
  - 2-5°C
- Q. No. 69** For microencapsulation of sperm following techniques are used
- Distillation
  - Pan coating
  - Isomerization
  - Fractionlisation
- Q. No. 70** During flow cytometer sperm cell sorting, Y bearing sperm move towards
- + field
  - Move straight down
  - field
  - Move straight down
- Q. No. 71** ICSI stands for
- Intracytoplasmic sperm injection
  - Intracervical semen insemination
  - Invivo* cell strand inoculation
  - Invivo* semen insemination
- Q. No. 72** In equine body condition score is measured on a scale of
- 1-10
  - 1-9
  - 1-5
  - 1-20

- Q. No. 73** Most severe form of downward head deviation is in the condition
- Nape presentation
  - Vertex presentation
  - Poll presentation
  - Wry neck
- Q. No. 74** Knuckling of the fetlock and dropping of the hock joint is seen in
- Obturator nerve paralysis
  - Peroneal nerve paralysis
  - Rupture of gastrocnemius muscle
  - Sciatic nerve paralysis
- Q. No. 75** Anterior longitudinal presentation, dorso sacral position with forward extension of hind limb beneath fetal body is
- Breech presentation
  - Dog sitting posture
  - Transverse ventral presentation
  - Transverse dorsal presentation
- Q. No. 76** GPC content is highest in semen ejaculate of
- Ram
  - Bull
  - Boar
  - Stallion
- Q. No. 77** Subinvolution of placental sites is commonly observed in
- Ewe
  - Bitches
  - Doe
  - Cow
- Q. No. 78** To treat TVT in dogs cyclophosphamide is given at dose rate and route
- 25 mg/kg IV
  - 5 mg/kg IV
  - 25 mg/kg PO
  - 5 mg/kg PO
- Q. No. 79** Pluset contains
- FSH and LH
  - GnRH
  - hCG
  - LH

- Q. No. 80** A bitch is brought in clinics with greenish vaginal discharge even after 5 days of whelping indicates
- Retention of placenta
  - Uterine rupture
  - Metritis
  - Eclampsia
- Q. No. 81** Cause of death in bitch affected with pyometra is
- Damage to kidney
  - Apnea
  - Tachycardia
  - Damage to brain
- Q. No. 82** Long standing cases of cystic ovarian degeneration in cows may result into
- Perimetritis
  - Endometritis
  - Mummification
  - Hydrometra
- Q. No. 83** Early pregnancy factor can be detected as early as
- 1 day after fertilization
  - Day 10 of pregnancy
  - 4 day after fertilization
  - Day 21 of pregnancy
- Q. No. 84** Example of class-I anestrus is
- Pregnancy
  - Severe debility
  - Senility
  - Smooth ovaries
- Q. No. 85** The period of fetus in cattle is
- 65 days to parturition
  - 45 days to parturition
  - 10 days to parturition
  - 35 days to parturition
- Q. No. 86** Illerlin contains
- Dinoprost
  - Fenprostalene
  - Alphaprostol
  - Tiaprost

- Q. No. 87**     **Hobbdays forceps are used in obstetrical cases in**
- a. Cow
  - b. Buffalo
  - c. Bitch
  - d. Doe
- Q. No. 88**     **Rubbin insuffulation is done to diagnose blockade of**
- a. Fallopian tube
  - b. Uterine horn
  - c. Cervix
  - d. Urethra
- Q. No. 89**     **Serologic test is recommended for diagnosis of one of the following diseases**
- a. Vibriosis
  - b. Trichomoniasis
  - c. Campylobacteriosis
  - d. Brucellosis
- Q. No. 90**     **Selenium deficiency is usually observed in newborn**
- a. Piglet
  - b. Pup
  - c. Lamb
  - d. Calf
- Q. No. 91**     **Gestational length in swine**
- a. 114 days
  - b. 90 days
  - c. 62 days
  - d. 149 days
- Q. No. 92**     **Rupture of pre-pubic tendon is common in \_\_\_ due to absence of sub pubic tendon**
- a. Mare
  - b. Buffalo
  - c. Cow
  - d. Bitch
- Q. No. 93**     **Epizootic bovine abortion is caused by**
- a. Herpes simplex
  - b. Chlamydia
  - c. Vibrio fetus intestinalis
  - d. Myxovirus Parainfluenza

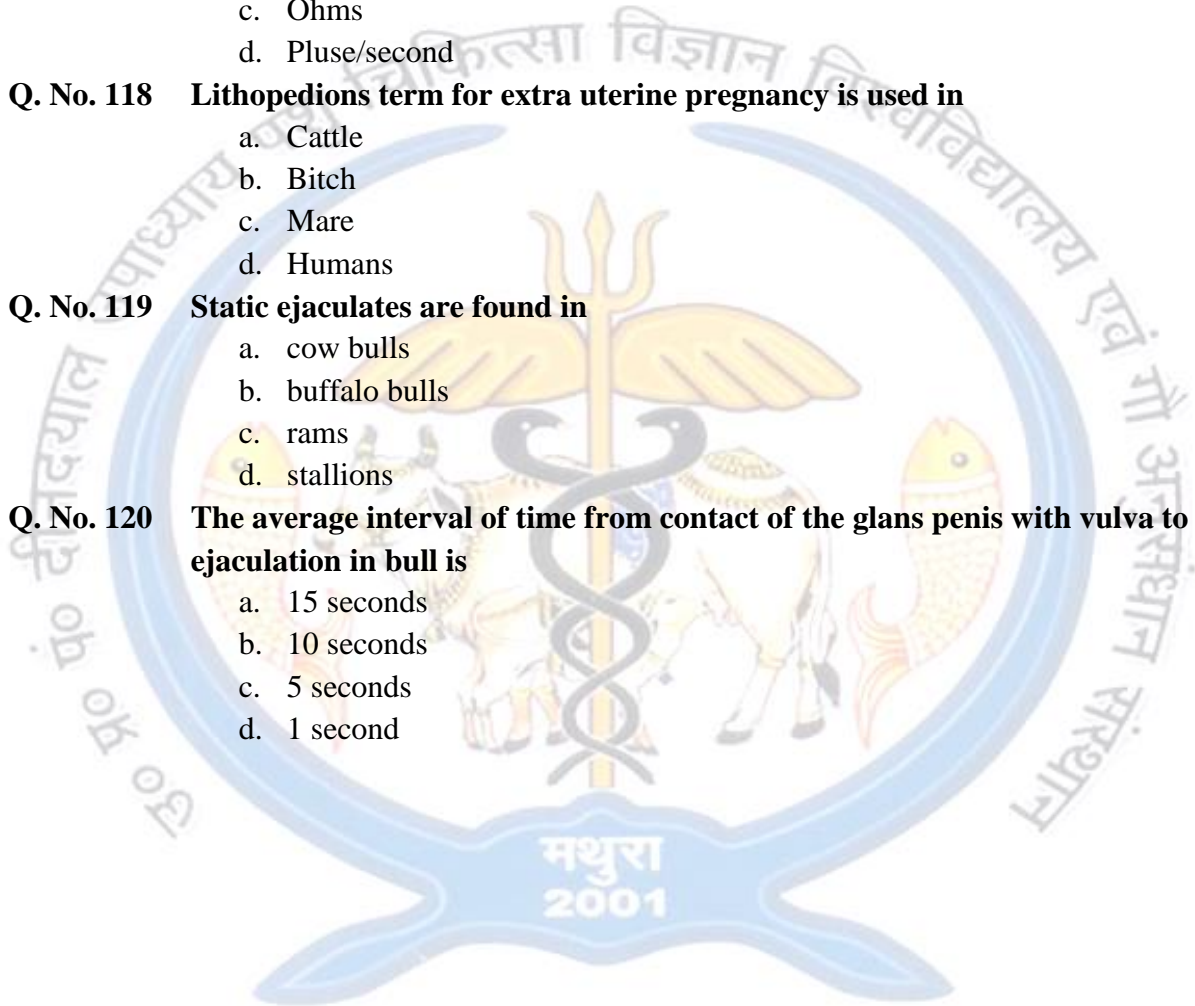
- Q. No. 94** One of the following cells do not divide but increase in size to about 30 microns in diameter to form the mature corpus luteum
- Granulosa cells
  - Corona radiata
  - Theca externa
  - Theca interna
- Q. No. 95** Which among following statement regarding steroid hormone is untrue
- Precursor is cholesterol
  - Natural steroids are effective orally
  - Synthetic steroids can be given orally/injection
  - Have a m.wt of 300-400 daltons
- Q. No. 96** During flow cytometry based sperm sexing , X- sperms are given :
- Negative charge
  - Either positive or negative charge
  - Positive charge
  - No charge
- Q. No. 97** Which of the following cryoprotectant is used for one step freezing of embryos
- DMSO
  - Sucrose
  - Ethylene glycol
  - Glycerol
- Q. No. 98** The uterine spasmolytic commonly used during caesarean section in bovine is
- Ethyl alcohol
  - Ergot alkaloids
  - Isoxpurine
  - Fenpiperamide
- Q. No. 99** Stem cells on the basis of their origin can be categorized into \_\_\_\_\_ types.
- 5
  - 4
  - 3
  - 2
- Q. No. 100** Example of hormone which is fatty acid in nature is
- Prostaglandin
  - Inhibin
  - Vit D
  - Relaxin

- Q. No. 101** Zona hatching in cattle occurs on day
- 9-11
  - 8
  - 7-8
  - 6-7
- Q. No. 102** PGE2 helps in maternal recognition of pregnancy in
- Sheep
  - Mare
  - Goat
  - Cattle
- Q. No. 103** The *in-vitro* viability of embryos is estimated by the ability of cell to exclude
- Trypan blue dye
  - Giemsa
  - Eosin
  - Nigrosin
- Q. No. 104** Zwitter ionic buffers are preferred for extending semen due to its
- Easy availability
  - Easy microscopic examination of extended semen
  - Prevention of cellular damage during freezing
  - Better buffering capacity
- Q. No. 105** Smaller embryonic mass provides \_\_\_\_\_ antiluteolytic signals.
- Weak
  - No signals
  - Strong
  - Very strong
- Q. No. 106** Adluminal compartment in testis contains
- Spermatogonia and Preleptotene spermatocytes
  - Spermatogonia and Leptotene spermatocytes
  - Spermatogonia and Zygotene spermatocytes
  - Spermatogonia and Pachytene spermatocytes
- Q. No. 107** Lordosis behaviour during sexual receptivity is observed in
- Cats
  - Sheep
  - Goat
  - Mare
- Q. No. 108** Protein hormones are having receptors in
- Cell membrane
  - Nucleus
  - Cytoplasm
  - Mitochondria

- Q. No. 109 Oogonial mitosis is completed after birth in**
- Cow
  - Ewe
  - Doe
  - Sow
- Q. No. 110 Inhibin is secreted from**
- Granulosa cell and Sertoli cell
  - Granulosa cell and Anterior Pituitary
  - Granulosa cell and Posterior pituitary
  - Granulosa cell and Leydigs cell
- Q. No. 111 Maximum number of follicular waves have been reported in which of the following species**
- Bovine
  - Ovine
  - Caprine
  - Swine
- Q. No. 112 Pregnant female conceiving again and carrying second conceptus is termed as**
- Telogony
  - Superfetation
  - Superfecundation
  - Bipregnancy
- Q. No. 113 Sperm reservoirs are localized in pig at**
- Uterotubal junction
  - Endometrial glands
  - Cervix
  - Uterine body
- Q. No. 114 Cleavage of oocyte without participation of nucleus occurs in**
- Parthenogenesis
  - Gynogenesis
  - Androgenesis
  - Digenesis
- Q. No. 115 Mode of transmission of hormones through interstitial fluid is termed as**
- Epicrine
  - Paracrine
  - Endocrine
  - Exocrine



- Q. No. 116 Makler chamber is used for evaluation of**
- Sperm concentration
  - Sperm motility
  - Sperm volume
  - Sperm metabolism
- Q. No. 117 Unit for measuring Vaginal Mucus Impedance is**
- Volt
  - Ampere
  - Ohms
  - Pluse/second
- Q. No. 118 Lithopedions term for extra uterine pregnancy is used in**
- Cattle
  - Bitch
  - Mare
  - Humans
- Q. No. 119 Static ejaculates are found in**
- cow bulls
  - buffalo bulls
  - rams
  - stallions
- Q. No. 120 The average interval of time from contact of the glans penis with vulva to ejaculation in bull is**
- 15 seconds
  - 10 seconds
  - 5 seconds
  - 1 second



**Key: Veterinary Gynaecology and Obstetrics**

Question Number	Answer	Question Number	Answer	Question Number	Answer
Q.no 1	a	Q.no 41	a	Q.no 81	a
Q.no 2	b	Q.no 42	c	Q.no 82	d
Q.no 3	b	Q.no 43	c	Q.no 83	a
Q.no 4	d	Q.no 44	a	Q.no 84	a
Q.no 5	a	Q.no 45	b and d	Q.no 85	b
Q.no 6	a	Q.no 46	a	Q.no 86	d
Q.no 7	b	Q.no 47	c	Q.no 87	c
Q.no 8	b	Q.no 48	a	Q.no 88	a
Q.no 9	a	Q.no 49	d	Q.no 89	d
Q.no 10	a	Q.no 50	b	Q.no 90	c
Q.no 11	a	Q.no 51	c	Q.no 91	a
Q.no 12	c	Q.no 52	b	Q.no 92	a
Q.no 13	c	Q.no 53	a	Q.no 93	b
Q.no 14	a	Q.no 54	b	Q.no 94	a
Q.no 15	a	Q.no 55	b	Q.no 95	b
Q.no 16	a	Q.no 56	a	Q.no 96	c
Q.no 17	c	Q.no 57	a	Q.no 97	c
Q.no 18	a	Q.no 58	c	Q.no 98	c
Q.no 19	b	Q.no 59	b	Q.no 99	b
Q.no 20	b	Q.no 60	b	Q.no100	a
Q.no 21	d	Q.no 61	c	Q.no101	a
Q.no 22	b	Q.no 62	a	Q.no102	b
Q.no 23	a	Q.no 63	b	Q.no103	a
Q.no 24	a	Q.no 64	d	Q.no104	d
Q.no 25	b	Q.no 65	b	Q.no105	a
Q.no 26	c	Q.no 66	b	Q.no106	a
Q.no 27	d	Q.no 67	c	Q.no107	a
Q.no 28	a	Q.no 68	a	Q.no108	a
Q.no 29	a	Q.no 69	b	Q.no109	d
Q.no 30	b	Q.no 70	a	Q.no110	a
Q.no 31	a	Q.no 71	a	Q.no111	c
Q.no 32	b	Q.no 72	b	Q.no112	b
Q.no 33	c	Q.no 73	a	Q.no113	a
Q.no 34	b	Q.no 74	b	Q.no114	c
Q.no 35	d	Q.no 75	b	Q.no115	b
Q.no 36	a	Q.no 76	a	Q.no116	a
Q.no 37	a	Q.no 77	b	Q.no117	c
Q.no 38	c	Q.no 78	d	Q.no118	d
Q.no 39	a	Q.no 79	a	Q.no119	b
Q.no 40	c	Q.no 80	a	Q.no120	d