

## FINAL ANSWER KEY

Question 56/2024/OL

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Question1:-Which of the following statement is not true regarding testis?

A:-Sertoli cells provide blood testis barrier

B:-Foetal Leydig cells produce Anti Mullerian Hormone (AMH)

C:-Leydig cells contain crystals of 'Reinke'

D:-Secondary Spermatocytes have a haploid number

Correct Answer:- Option-B

Question2:-Which of the following is a remnant of the mesonephric duct?

A:-Ligament of ovary

B:-Round Ligament of Uterus

C:-Duct of Bartholin's gland

D:-Duct of Gartner

Correct Answer:- Option-D

Question3:-Which of the following does not constitute placental barrier in full term pregnancy?

A:-Cytotrophoblast

B:-Syncytiotrophoblast

C:-Basement membrane of foetal capillary

D:-Endothelial cells of foetal capillary

Correct Answer:- Option-A

Question4:-Regarding physiology of gonadotropin releasing hormone (GnRH) and its disease states, which of the following options is correct?

(i) Women with rapid pulses of GnRH have anovulatory cycles.

(ii) In premenopausal women treatment with aromatase inhibitors leads to decreased serum follicle stimulating hormone levels

(iii) There is selective clinical phenotype in Kallman Syndrome, dental agenesis is seen in patients with FGF8 or FGFR1 mutation

(iv) The activation of gene expression of specific beta subunits of gonadotropins depends on stimulation of pituitary gonadotrophs by intermittent GnRH pulses

A:-only (ii) and (iv)

B:-All are true

C:-(i), (iii) and (iv)

D:-Only (i) and (iii)

Correct Answer:- Option-C

Question5:-Regarding spermatogenesis, which of the following options is correct?

- (i) Oligospermia in a patient who underwent scrotal irradiation 4 weeks ago is explained because of the treatment he received
- (ii) In male infants with congenital gonadotropin deficiency lack of postnatal surge in serum gonadotropin concentration results in a lower number of sertoli cells and spermatogonia
- (iii) Intratesticular testosterone concentration and FSH determine spermatogenesis
- (iv) Of all the cells in the testis, Spermatogonia A dark are least sensitive to ionising irradiation

A:-Only (i) and (ii)

B:-Only (ii) and (iii)

C:-(i), (iii) and (iv)

D:-(ii), (iii) and (iv)

Correct Answer:- Option-D

Question6:-Regarding fetal and neonatal endocrine physiology which of the following options is correct?

- (i) Epidemiological data report impairment to intellectual function and behaviour in infants with normal thyroid function but are born to mothers with mild untreated or subclinical hypothyroidism.
- (ii) Plasma Oxytocin concentration in human cord blood are elevated in association with fetal bradycardia or meconium aspiration.
- (iii) Cells with zona reticularis morphology are detectable in human adrenal cortex at 3 months in the involuting fetal zone
- (iv) Specific genetic mechanisms dictating ovarian development include WNT/beta catenin and FOXO/FOXL2 pathways

A:-Only (i) and (iv)

B:-Only (ii) and (iii)

C:-Only (i) and (ii)

D:-Only (iii) and (iv)

Correct Answer:- Option-A

Question7:-Depot Gosarelin is used in all except

A:-Precocious puberty

B:-Prostatic carcinoma

C:-Uterine Leiomyoma

D:-Testicular Seminoma

Correct Answer:- Option-D

Question8:-Ulipristal is a

A:-Selective Estrogen Receptor Modulator

B:-Selective Progesterone Receptor Modulator

C:-GnRH analogue

D:-GnRH antagonist

Correct Answer:- Option-B

Question9:-Select the drug therapy for prolactinoma

A:-Carbergoline

B:-Lanreotide

C:-Raloxifene

D:-Lubiprostone

Correct Answer:- Option-A

Question10:-Following statements are true regarding carcinoma cervix.

(i) HPV 16 accounts for 60% of cervical cancer

(ii) LSIL is not treated like a premalignant condition.

(iii) HPV DNA testing has higher sensitivity, but lower specificity compared to Pap test.

(iv) Most common histological subtype is squamous cell carcinoma

A:-(i) and (ii)

B:-(i), (ii) and (iv)

C:-(i) and (iv)

D:-(i), (ii), (iii) and (iv)

Correct Answer:- Option-D

Question11:-The following statements and true regarding germ cell tumours

(i) Germ cell tumours account for 80% of all ovarian tumours

(ii) Most of them are benign cystic teratomas.

(iii) Inflammatory limbic encephalitis is a paraneoplastic syndrome associated with teratoma

(iv) About 1% of teratomas undergo malignant transformation

A:-(i) and (ii)

B:-(ii) and (iii)

C:-(ii), (iii) and (iv)

D:-(i), (ii), (iii) and (iv)

Correct Answer:- Option-C

Question12:-All the following infections arise first in the epididymis and spread to testes except

A:-Tuberculosis

B:-Gonorrhoea

C:-Syphilis

D:-Chlamydia trachomatis

Correct Answer:- Option-C

Question13:-Which of the following statements is/are correct?

(i) Trophoblast cells do not express major histocompatibility class I antigen HLA-A

and B

(ii) Extra villous cytotrophoblast cells express classical Major histocompatibility class I HLA-C and the nonclassical HLA E, F and G-products.

(iii) Selected trophoblast cells express major histocompatibility class II molecules.

(iv) Natural killer cells kill cells that do not express major histocompatibility class molecules.

A:-(i) and (ii) are correct

B:-(i), (ii), (iii) are correct

C:-(i), (ii), (iv) are correct

D:-all are correct

Correct Answer:- Option-C

Question14:-Progesterone helps in the maintenance of the semi allogenic implanting fetus by

A:-Stimulating T cell effector function

B:-Promoting T cell gene expression of TH1 type T help cell response

C:-Increasing expression of Leukaemia inhibiting factor

D:-Stimulating Mitogen induced proliferation of and cytokine secretion by CD8+Tcells

Correct Answer:- Option-C

Question15:-The key enzymes necessary for estrogen biosynthesis by placenta are all Except

A:-Steroid 17 alpha hydroxylase

B:-Steroid sulfatase

C:-Cytochrome P450 aromatase

D:-17 beta hydroxy steroid dehydrogenase

Correct Answer:- Option-A

Question16:-The risk of an offspring with full mutation in a woman with fragile X premutation is dependent primarily on

A:-number of DNA triple repeat

B:-sex of the offspring

C:-age of the offspring

D:-Affection of one of both X chromosomes

Correct Answer:- Option-A

Question17:-During the cyclic follicular development phase in the ovaries, the Follicle Stimulating Hormone (FSH) level is suppressed by all Except

A:-Rising Estrogen levels

B:-Rising Inhibin B levels

C:-Rising Inhibin A levels

D:-Rising Activin levels

Correct Answer:- Option-D

Question18:-A 17-year girl presented with primary amenorrhoea. Her height is 175 cm. She had tanner stage 3 breast development, bilateral inguinal masses, sparse to no pubic and axillary hair, normal female external genitalia. Vagina was blind, 3 cm deep. Uterus was absent on sonography. What is the most likely diagnosis?

- A:-Mullerian Agenesis
- B:-Testicular feminization
- C:-Reifenstein Syndrome
- D:-McCune Albright Syndrome

Correct Answer:- Option-B

Question19:-A girl achieved menarche and developed severe hirsutism at 12 years of age. Her 17-hydroxy progesterone level was 75 ng/dl and free testosterone level was 430ng/dl. The next step for diagnosis is

- A:-Karyotyping
- B:-ACTH stimulation test
- C:-CT Scan abdomen and pelvis
- D:-Fasting glucose/insulin level

Correct Answer:- Option-C

Question20:-Vasomotor symptoms associated with menopause can be treated by all Except

- A:-Venlafaxine
- B:-Ospemifene
- C:-Bazedoxifene
- D:-Gabapentin

Correct Answer:- Option-B

Question21:-Regarding sperm evaluation in infertile couple

A:-Magnetic-Activated cell sorting (MACS) technique for "Sperm preparation techniques" is proved to increase live birth rate

B:-Sperm oxidative stress negatively affect all sperm function and reproductive outcome

C:-FISH (Fluoresce in situ hybridization) test is used as diagnostic tool for diagnosis of balanced chromosomal translocation in sperm.

D:-Karyotype test is done for testing sperm DNA fragmentation

Correct Answer:- Option-B

Question22:-In case of frozen embryo transfer (FET)

A:-In natural cycle of FET, sequential estrogen and progesterone are given to women at a minimal dose

B:-Natural cycle FET can increase the risk of ovarian hyperstimulation syndrome

C:-Programmed cycle FET decreases the risk of hypertensive disorder of pregnancy

D:-Natural cycle results in a thicker endometrium as compared to hormone replacement therapy (HRT) cycle.

Correct Answer:- Option-D

Question23:-Hyperprolactinemia is caused by all except

A:-Renal failure

B:-Hypothyroidism

C:-H2 antagonist

D:-Bromocriptine

Correct Answer:- Option-D

Question24:-Regarding ART Act and Surrogacy Act of India

A:-Couple undergoing Surrogacy must have both gamete from the intending couple

B:-transfer of the embryo into the reproductive system of a woman comes under level 1 ART clinics

C:-Sperm donor should not be tested for HIV as it breaches the confidentiality

D:-Clinics doing intrauterine insemination (IUI) procedure carried out as part of treatment in not essential to be registered under ART Clinic

Correct Answer:- Option-A

Question25:-Regarding Ovarian hyper stimulation syndrome (OHSS):

A:-Early OHSS tends to be more prolonged and severe than the late form

B:-Elevated haematocrit, reduced serum osmolality and serum sodium is indicative of OHSS

C:-Paracetamol is the first line of treatment for mild cases of OHSS

D:-Anti-coagulant should not be given in severe cases of OHSS

Correct Answer:- Option-B

Question26:-All are true about cause of anovulation Except:

A:-Polycystic ovarian syndrome results in Normo-gonadotropic Normo-estrogenic Anovulation

B:-Anorexia nervosa can lead to Hypogonadotropic Hypogonadal Anovulation

C:-Premature ovarian failure can lead to elevated serum FSH and low AMH concentrations

D:-Hypothalamic-pituitary imaging is indicated when hyperprolactinemia is coexist with hypothyroidism

Correct Answer:- Option-D

Question27:-All are true about Uterine biophysical profile Except

A:-Ovarian artery doppler PI is considered as most informative parameter

B:-Lesser score is given if endometrial thickness is 15 mm as compared to a

thickness of 10mm

C:-Presence of myometrial blood flow is scored more as compared to absence of myometrial blood flow

D:-Distinct 5 line appearance of endometrial layering on transabdominal ultrasound is given the highest score

Correct Answer:- Option-A

Question28:-Criteria for a failed pregnancy includes all Except

A:-Absence of an embryo when the mean sac diameter is greater than 25 mm

B:-Presence of a fetus with a CRL of 10 mm and no heartbeat

C:-6 mm difference between gestational sac diameter and the CRL of the embryo

D:-Absence of an embryo with a heartbeat 15 days after a gestational sac with a yolk sac was seen

Correct Answer:- Option-D

Question29:-Regarding fetal reduction

A:-Better outcome with transvaginal approach

B:-Selective fetal reduction is done in dichorionic diamniotic twin pregnancy with one fetus diagnosed with trisomy 21

C:-Normal saline (2 ml) is used for fetal reduction to have less complication

D:-Preferred method of fetal reduction in monochorionic diamniotic twin pregnancy is chemical injection into one fetus

Correct Answer:- Option-B

Question30:-Best method to diagnose tubal patency is

A:-Hysterosalpingography

B:-Saline sonosalpingography

C:-Computerized tomography of lower pelvis

D:-Laparoscopy with tubal patency assay

Correct Answer:- Option-D

Question31:-Ultrasound in early pregnancy can indicate a possible scar pregnancy if

A:-Gestation sac is seen above the endometrial line

B:-Myometrial thickness is 5 mm

C:-Empty uterine cavity and cervix

D:-No blood flow in the area of previous cesarian scar

Correct Answer:- Option-C

Question32:-Endometrial biopsy is indicated in women if transvaginal ultrasound showed endometrial thickness to be 5mm in

A:-Postmenopausal women with recurrent bleeding P/V

B:-Asymptomatic postmenopausal women

C:-Women with Tamoxifen for carcinoma breast without any abnormal uterine bleeding (AUB)

D:-Perimenopausal women with AUB

Correct Answer:- Option-A

Question33:-As per WHO 2021, all of the following are normal values for semen analysis expect

A:-Sperm concentration: 16 million/ml

B:-Progressive motility: 30%

C:-Vitality: 54%

D:-Normal Morphology: 6%

Correct Answer:- Option-D

Question34:-Duration of treatment with antibiotics for genital infections in men is:

A:-One week

B:-Two weeks

C:-Four weeks

D:-Six weeks

Correct Answer:- Option-D

Question35:-Which of the following statements about varicocele and its surgery is not correct?

A:-Varicocele may be observed in 30-40% cases of male infertility

B:-Varicocele maybe observed in up to 20% fertile men

C:-Usually surgical ligation of internal spermatic vein is performed for varicocele syrgery

D:-There is level I evidence that varicocele surgery improves pregnancy outcome

Correct Answer:- Option-D

Question36:-Which statement about intracytoplasmic sperm injection (ICSI) is not true?

A:-For ICSI minimum sperm concentration should be atleast 10 million sperms/ml

B:-It can also be performed for totally immotile spermatozoa

C:-It can be performed for morphologically abnormal sperms

D:-It can also be performed for obstructive azoospermia after surgical retrieval of sperms from testes

Correct Answer:- Option-A

Question37:-Which of the following is not indication of artificial insemination donor?

A:-Azoospermia

B:-Asthenospermia

C:-Genetic disease in women

D:-Uncorrectable immunological factors

Correct Answer:- Option-C

Question38:-Which of the following drugs is used for treatment of premature ejaculation?

A:-Dapoxetine

B:-Sildenafil

C:-Tadalafil

D:-Prednisolone

Correct Answer:- Option-A

Question39:-During invitro fertilisation and embryo transfer (IVF, ET), the embryo implanted into the prepared endometrium has how many cells?

A:-Two cells

B:-Four cells

C:-Eight cells

D:-Sixteen cells

Correct Answer:- Option-C

Question40:-The commonest site of implantation of trophoblast in uterine cavity is

A:-Anterior surface of upper uterine segment

B:-Posterior surface of upper uterine segment

C:-Anterior surface of lower uterine segment

D:-Posterior surface of lower uterine segment

Correct Answer:- Option-B

Question41:-Ovulation occurs after how many hours of LH surge:

A:-6-8 hours

B:-12-16 hours

C:-24-30 hours

D:-30-36 hours

Correct Answer:- Option-D

Question42:-Best test for measurement of ovarian reserve is

A:-AMH levels

B:-Basal FSH levels

C:-Inhibin B levels

D:-Estradiol levels

Correct Answer:- Option-A

Question43:-Gestational surrogacy is advised in the following candidates except:

A:-Mullerian agenesis

B:-Following hysterectomy

C:-Turner's Syndrome

D:-Genital tuberculosis with blocked tubes and severe Asherman syndrome

Correct Answer:- Option-C

Question44:-Which of the following ovulation inducing drug is associated with least risk of ovarian hyperstimulation syndrome (OHSS)?

A:-Clomiphene citrate

B:-Letrozole

C:-FSH and LH injection

D:-HCG injection

Correct Answer:- Option-B

Question45:-Which of the following is not the pre requisite for medical management with methotrexate for ectopic pregnancy?

A:-Patient hemodynamically stable

B:-Unruptured adnexal mass of less than 4 cm on scan

C:-Serum hCG levels don't exceed 5000IU/L

D:-Fetal cardiac activity should be present

Correct Answer:- Option-D

Question46:-Rubin's criteria are used for diagnosis of which ectopic pregnancy?

A:-Ovarian pregnancy

B:-Abdominal pregnancy

C:-Cervical pregnancy

D:-Cornual pregnancy

Correct Answer:- Option-C

Question47:-As per Royal College of Obstetricians and Gynaecologists recommendations, which of the following investigations is not recommended for evaluation of a patient of recurrent miscarriage?

A:-TORCH screening

B:-Parental cytogenetic analysis

C:-Lupus anticoagulant and anticardiolipin antibodies assay

D:-Pelvic ultrasound for uterine cavity and ovarian morphology

Correct Answer:- Option-A

Question48:-Which of the following cervical cerclage operation is done by abdominal route?

A:-Shirodkar's cerclage

B:-Benson and Durfee cerclage

C:-Lash and Lash operation

D:-Wurm's stitch

Correct Answer:- Option-B

Question49:-Triploid (69, XXX or 69, XXY) karyotype is seen in which type of gestational trophoblastic disease?

A:-Complete mole

B:-Partial mole

C:-Invasive mole

D:-Placental site trophoblastic tumor

Correct Answer:- Option-B

Question50:-Twin peak sign on ultrasound is seen in which type of twin pregnancy?

A:-Monoamniotic monochorionic twin pregnancy

B:-Diamniotic monochorionic twin pregnancy

C:-Monoamniotic dichorionic twin pregnancy

D:-Diamniotic dichorionic twin pregnancy

Correct Answer:- Option-D

Question51:-32 year old lady, married for 4 years, P0000 visits the clinic with USG report of fibroid uterus and AMH of 0.8ngm/ml

A:-Antimullerian hormone of 0.8ngm/ml may indicate POF

B:-Pedunculated subserosal fibroid at fundus is the cause for infertility

C:-Submucosal fibroid can be diagnosed by MRI with >90% sensitivity

D:-Preoperative treatment with GnRH analogues may decrease the volume of fibroid

Correct Answer:- Option-B

Question52:-All is true about polycystic ovarian syndrome except

A:-Stein and Leventhal first presented their work on PCOS in 1935

B:-The Endocrine dysfunction of PCOS does not involve somatotrophic axis (growth hormone) and adrenocorticotrophic axis

C:-Familial clustering is common in PCOS

D:-Altered waist hip ration of  $\geq 0.85$  suggest hyperandrogenism in PCOS women

Correct Answer:- Option-B

Question53:-Regarding Ovarian Follicular development

A:-Folliculogenesis is a process designed to allow monthly recruitment of cohort of primordial follicles

B:-Two cell two Gonadotrophin theory balances the hormones to result in preovulatory follicle

C:-Androgen excess is needed for ovulation to take place

D:-At higher concentration estrogen enhances the LH release

Correct Answer:- Option-C

Question54:-Female genital Tuberculosis is a common cause for infertility. All is true except

A:-Incidence of Tuberculosis is high in infertile women ranging from 5-10%

B:-Fallopian tube is most commonly affected in 92-100% women with disease

C:-Combination of culture and PCR has highest sensitivity and specificity of 100%

D:-Tubal reconstructive surgery is advisable and has return of fertility to 80%

Correct Answer:- Option-D

Question55:-In the diagnosis algorithm for early diagnosis of ectopic pregnancy, following has been recommended, except

A:-Report of transvaginal ultrasonography with an intrauterine gestational sac, excludes the extrauterine pregnancy in most cases

B:-Adnexal gestation sac with a yolk sac or embryo, seen on TVS confirms diagnosis of ectopic pregnancy

C:-Mass of 1 cm can be identified

D:-A Beta HCG level of >3510 mIU/ml and no intrauterine sac on TVS

Correct Answer:- Option-C

Question56:-Following statements hold true regarding mechanism of subfertility in endometriosis, except

A:-Inflammation causes release of inflammatory cytokines like IL-6 and TNF- $\alpha$

B:-Impaired folliculogenesis is caused by cortical damage to ovary by endometrioma

C:-Endometrioma does not have any effect on AMH

D:-Pelvic adhesion can result from inflammatory insult to peritoneal lining

Correct Answer:- Option-C

Question57:-Post-operative adhesion Spectrum is a persistent problem. All holds true with it; except

A:-Fibrinolysis dysregulation are the main cause for adhesion formation

B:-Modifying surgical technique by adopting laparoscopic method does not decrease adhesion formation

C:-Natural polymers (hyaluronic acid) inhibit inflammatory response and promote wound healing

D:-Polyethylene Glycol (PEG) has excellent biocompatibility and is used to cover injured site

Correct Answer:- Option-B

Question58:-In relation to genomic processes following statements are true except:

A:-Mutation is a change in DNA sequence, that can be a basic substitution, deletion or insertion

B:-Expressivity is the degree of genotypic expression of a particular genotype

C:-Penetrance is proportion of measure that individuals in a population express related to phenotype of a condition

D:-Genomic imprinting or epigenetics is phenomenon where genes can be expressed in a parent of origin specific manner

Correct Answer:- Option-B

Question59:-For implementation of carrier screening guidelines

A:-Genetic counselling is not important

B:-Testing is mandatory for an individual

C:-Pedigree charting is an optional step to ascertain risk in X-linked disorder

D:-As per ACOG Committee opinion published in 2017; screening for hemoglobinopathies, CF and SMA should be offered to all

Correct Answer:- Option-D

Question60:-Chromosome analysis is done by all methods except

A:-Karyotyping

B:-Microarray

C:-Flourescence in-situ hybridization

D:-Mass spectroscopy

Correct Answer:- Option-D

Question61:-In Prenatal Diagnosis of Skeletal Dysplasia,

A:-Antenatal assessment of risk of skeletal dysplasia cannot be done by non-invasive method

B:-Severe lethal dysplasia can be suspected by decreased CRL and increased nuchal thickness

C:-Exome sequencing or CVS can be done if causative variant of SD not known

D:-Prenatal USG parameters like chest/AC-<0.7;HC?chestc->0.5;AC/FL-<0.16, suggest a lethal skeletal dysplasia

Correct Answer:- Option-A

Question62:-Following is true for Banding techniques for chromosome analysis except

A:-Chromosomes display a succession of more or less coloured bands along their arms

B:-Banding patterns are reproductive to each chromosome

C:-They may help in comparison of chromosomes within and in related species

D:-They do not permit detail description of chromosomal or structural rearrangement

Correct Answer:- Option-D

Question63:-Following is true for Recurrent Pregnancy loss, except

A:-The overall rate of genetic association in form of numerical or structural chromosomal arrangement is 5-10%

B:-Aneuploidy is the most common cause in 70% of spontaneous first trimester spontaneous miscarriage

C:-Balanced Translocation is present in 50% of RPL in any one of the partner

D:-CPM (Confined Placental Mosaicism) is present in 15 of Recurrent pregnancy losses where placenta is deformed

Correct Answer:- Option-C

Question64:-For single gene disorder following stands correct except

A:-There is known alteration or mutation in one of 20,000 genes in every cell of body

B:-cannot be inherited through one or more generation of the family

C:-SGDS (Single Gene Disorder Screening) helps in embryo selection

D:-SDGS enables families to decrease risk for having child with that single gene order

Correct Answer:- Option-B

Question65:-Cytogenetics when combined with Molecular Medicine evolves to form a speciality of molecular cytogenetics. Following is true except

A:-The field is focussed on studying the evolution of chromosomes

B:-It involves the study of number, structure, function and origin of chromosomal abnormalities

C:-Virtual karyotype are generated from arrays made of thousands to millions of probes

D:-Computational tools are used to recreate the genome in saline

Correct Answer:- Option-D

Question66:-Which of the following statements is correct regarding a child born through ART?

A:-Child has no right to seek information about his/her genetic parent

B:-Child has the right to know the personal identity of the genetic parent

C:-The parents are obliged to inform the child about the details of genetic, parent once child reaches 18 years

D:-Child has the right to collect information about DNA fingerprint of genetic parents on reaching 18 years

Correct Answer:- Option-D

Question67:-All of the following statements regarding National Database for Human Fertility in India are true, except

A:-Data will help in overcoming iatrogenic transmission of defective genes

B:-India has well documented database for Human Fertility procedures

C:-Helps keep pace with rapid developments in molecular knowledge of

human reproduction

D:-Helps detect genetic cause for male infertility tests eg. FISH

Correct Answer:- Option-B

Question68:-Information counselling for those undergoing ART procedures should include all except

A:-Counseling must be in local language that can be understood by the couple

B:-Should avoid discussing about possibility of failure to prevent risk of depression

C:-Each partner has autonomy for decision making

D:-Disclosure of any personal issue to other partner requires prior consent

Correct Answer:- Option-B

Question69:-According to Surrogacy Regulation Act 2021, all are true except

A:-A single unmarried woman cannot opt for surrogacy route

B:-Both the gametes used... sperm or oocyte can be donated ones

C:-District medical board must issue certification of indication for using donor gamete

D:-Gamete donor has confidentiality assured

Correct Answer:- Option-B

Question70:-The ICMR ART Regulation Act addresses all of the following except

A:-Rights of the infertile couple

B:-Ensure uniformity of qualifications and skills of the professionals in the ART clinic

C:-There are separate consent forms for each individual procedure

D:-Confidentiality assured of the identity of individuals involved

Correct Answer:- Option-B

Question71:-Vitrification of sperms causes all of the following except

A:-Increases motility and viability compared to slow freeze techniques

B:-Sperms can be stored indefinitely

C:-Reduces incidence of sperm defects

D:-Produces higher mitochondrial activity

Correct Answer:- Option-A

Question72:-Number of embryos transferred during IVF

A:-Depends on the request of the couple

B:-Maximum two

C:-More than three permissible in special circumstances

D:-Maximum three only

Correct Answer:- Option-C

Question73:-Which of the following statements are true in specifications in CARA, Dept of Health and Family Welfare?

A:-Single male cannot adopt a girl child

B:-There is no specification regarding age gap between prospective parents and adopted child

C:-Married couples with children are not eligible for adoption

D:-Consent of only one spouse is sufficient for adoption

Correct Answer:- Option-A

Question74:-Surrogacy Act 2022 - all of the following statements are false except

A:-It is mandatory for woman agreeing for surrogacy to undergo strict screening tests for communicable infections

B:-The couple can opt for desired sex of the baby

C:-Financial agreement and commercial payment to surrogate is done by ART clinic

D:-The gestational carrier cannot opt for MTP for personal reasons

Correct Answer:- Option-A

Question75:-Which of the following statements are false?

A:-Ova derived from fetus can be used for IVF in ART clinics

B:-Ova from fetuses can be used for research

C:-Research on embryos are restricted to only 14 days maturity

D:-Commercial transactions are prohibited in embryo research

Correct Answer:- Option-A

Question76:-Which one of the following cryoprotectants used in vitrification process are nonpermeable?

A:-Sucrose

B:-Dimethyl sulfide

C:-Glycerol

D:-Ethylene glycol

Correct Answer:- Option-A

Question77:-According to Surrogacy Regulation Act, which statement is false?

A:-A relative of the same generation only can be permitted to be a surrogate

B:-Advertisement for surrogacy can be displayed in the ART clinics

C:-A lady can act as surrogate only maximum of three times

D:-Prospective surrogate should give written declaration that she will not take prohibited drugs or transfusions

Correct Answer:- Option-B

Question78:-Which of the following statements are false?

A:-Oocyte donor cannot be surrogate mother for the couple for whom oocyte is

donated

B:-Only married women are eligible for ART

C:-Surrogate mother is registered as parent in casesheet in hospital records

D:-Only controlled ovarian hyperstimulation is permitted for oocyte donors

Correct Answer:- Option-B

Question79:-Which of following statements are false?

A:-ART clinics are prohibited to provide couples with child of desired sex

B:-Sperms can be donated irrespective of the age of the man

C:-Undergoing ART procedures without consent of spouse is a ground for divorce

D:-Age of oocyte donors must be between 18-35 years

Correct Answer:- Option-B

Question80:-The following statements are true except

A:-Embryos are usually preserved for five years

B:-Consent of couple is required for storage and use of embryos

C:-Specifications for storage of gametes and embryos can be decided by each ART clinic independently

D:-The couple will lose custody of the embryos if payment is defaulted inspite if reminders

Correct Answer:- Option-C

Question81:-In ART, some AI applications cannot be used for

1. Sperm selection and analysis
2. Embryo grading and selection
3. Ethnic disease population
4. Oocyte evaluation and selection

A:-1

B:-3

C:-1 and 4

D:-All of the above

Correct Answer:- Option-C

Question82:-Following are statements regarding cervical cerclage operation; identify true statement/statements

1. An emergency cerclage, when exposed membranes are present, with cervical length less than 25 mm is known as rescue cerclage
2. Cervical cerclage can be classified by indication or by level of placement
3. Low cervical cerclage, inserted transversely without bladder mobilisation is known as Shirodkar's operation
4. High cervical cerclage, transvaginally is called McDonald's cerclage

A:-1

B:-1 and 2

C:-1, 2 and 3

D:-All of the above

Correct Answer:- Option-C

Question83:-Which biochemical feature is often seen in hyperandrogenism associated with infertility?

A:-Elevated level of testosterone

B:-Decreased levels of insulin

C:-Elevated levels of LH

D:-Increased levels of SHBG

Correct Answer:- Option-C

Question84:-Extremely low estriol level in pregnancy indicates,

1. Placental aromatase deficiency
2. Adrenal hypofunction
3. Impending or present fetal demise
4. Drug related effects

A:-1

B:-2

C:-All of the above

D:-3

Correct Answer:- Option-C

Question85:-Which are true statements about AMH?

1. Production by granulosa cells of preantral and antral follicles
2. Primary function is autocrine and paracrine regulation of follicular development
3. AMH levels increases with oral contraceptive use
4. Low threshold values have good specificity for poor response to ovarian stimulation

True statements are

A:-4 and 1

B:-2 and 3

C:-1, 2 and 4

D:-All of the above

Correct Answer:- Option-C

Question86:-Most reliable simple test for ovulatory function is:

A:-Serum LH level

B:-Serum progesterone level

C:-Endometrial biopsy

D:-Urinary LH excretion

Correct Answer:- Option-B

Question87:-Infertility relating to mycomas are due to mechanism like,

1. Displacement of the cervix decreasing exposure to sperm
2. Distortion of the uterine cavity inhibiting sperm or ovum transport
3. Distorted adnexal anatomy, interfering with ovum capture
4. Anovulation

True statement/statements are:

A:-1

B:-1 and 2

C:-4

D:-1, 2 and 3

Correct Answer:- Option-D

Question88:-About male reproductive function, with ageing,

1. Semen volume and sperm motility decreases
2. Pregnancy rate decreases and time to conception increases
3. Serum total and free testosterone levels decrease
4. Advanced paternal age is associated with small increase in risk of spontaneous abortion

Correct statements are:

A:-1 and 2

B:-All of the above

C:-3 and 4

D:-2 and 3

Correct Answer:- Option-B

Question89:-Following are disorders of sperm transport except,

1. Young syndrome
2. Klinefelter syndrome
3. Kartagener syndrome
4. Kallman syndrome

A:-3

B:-1

C:-2 and 4

D:-All of the above

Correct Answer:- Option-C

Question90:-Test used to differentiate viable non mobile spermatozoa from dead spermatozoa

A:-Post coital test

B:-Vitality test

C:-Sperm Penetration test

D:-Antisperm Antibody test

Correct Answer:- Option-B

Question91:-True statements regarding clomiphene are:

1. Clomiphene is ineffective in women with hypergonadotrophic hypogonadism

2. Clomiphene is ineffective in women with hypogonadotropic hypogonadism
3. Clomiphene treatment is also been offered to normally ovulating women with unexplained infertility especially Young with short duration of infertility
4. Empiric clomiphene treatment for unexplained infertility is most effective when combined with IUI

A:-1 and 2

B:-3 and 4

C:-2, 3 and 4

D:-All of the above

Correct Answer:- Option-C

Question92:-Which of the following statement regarding metformin is/are correct?

1. Metformin is currently not recommended as a treatment for weight loss or anovulation
2. The use of metformin in women with PCOS is justified only in the presence of IGT or Type 2 Diabetes
3. Metformin is used prophylactically to prevent diabetes and to treat obesity
4. If lifestyle modification fails to reduce blood sugar, metformin is used

A:-1

B:-1, 2

C:-1, 2, 3

D:-1, 2, 4

Correct Answer:- Option-D

Question93:-The ideal time for multifetal pregnancy reduction under transabdominal ultrasound guidance is

A:-6 - 8 weeks

B:-8 - 10 weeks

C:-10 - 14 weeks

D:-16 - 18 weeks

Correct Answer:- Option-C

Question94:-The absolute indications of IVF are

1. Bilateral tubal block
2. Resistant anovulation
3. Premature ovarian failure
4. Total asthenospermia

A:-1 and 2

B:-1, 3 and 4

C:-2 and 4

D:-All of the above

Correct Answer:- Option-B

Question95:-Which of the following are correct statements regarding PGT-M(PGD)?

1. PGD is indicated for couples at risk for transmitting a specific genetic

abnormality to their offsprings

2. Used to detect genetic mutation that predisposes to a disease
3. To detect unbalanced chromosomal translocations
4. PCR is the method of choice for PGT-M

A:-1

B:-3

C:-4

D:-All of the above

Correct Answer:- Option-D

Question96:-Which of the following are incorrect statement/statements regarding fertility preservations?

1. Malignant diseases before chemotherapy
2. Oocyte cryopreservation can be done in prepuberty
3. Cryopreservation of embryos and oocytes fertility preservation options
4. Delays chemotherapy in case of embryo cryopreservation and oocyte cryopreservation

A:-1

B:-2

C:-1 and 3

D:-All of the above

Correct Answer:- Option-B

Question97:-Which of the following is the method of choice of treatment for Asherman syndrome?

1. Blind curettage of the endometrial cavity
2. pressure lavage with normal saline under guidance of TVUS
3. Hysteroscopy
4. Lysis using a balloon catheter under fluoroscopic control

A:-1

B:-3

C:-4 and 2

D:-4

Correct Answer:- Option-B

Question98:-Cervix serves as a sperm reservoir for

A:-12 hours

B:-24 hours

C:-48 hours

D:-72 hours

Correct Answer:- Option-D

Question99:-The correct statement/statements regarding preovulatory expansion of cumulus oophorus,

1. Increases the chance of encounter with one of the few spermatozoa that have

reached the far section of the tube

2. Prevents sperm penetration and fertilisation
3. This facilitates sperm passage through the cumulus
4. Increases the chance of blighted ovum

A:-1

B:-2

C:-1 and 3

D:-4

Correct Answer:- Option-C

Question100:-Factor/factors restricting trophoblast invasion into maternal blood vessels:

1. Plasminogen Activator Inhibitor I
2. Leukotrienes
3. Cytokines
4. Thromboxane A2

A:-4

B:-1 and 3

C:-1, 2 and 3

D:-All of the above

Correct Answer:- Option-C