

## FINAL ANSWER KEY

Question 51/2023/OL

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Question1:-Not true about osteoclasts

A:-Large and multinucleated cells

B:-Shows marked basophilia

C:-Presents a ruffled border and a clear zone

D:-Seen in Howship's lacunae

Correct Answer:- Option-B

Question2:-True about intercalated disc of cardiac myocytes

A:-It consists of transverse and lateral components

B:-Fascia adherens is the major constituent of transverse component

C:-Desmosomes are found only in the lateral component

D:-Both 1 and 2 are correct

Correct Answer:- Option-D

Question3:-Node of Bizzozzer is seen in which layer of epidermis ?

A:-Stratum corneum

B:-Stratum spinosum

C:-Stratum granulosum

D:-Stratum basale

Correct Answer:- Option-B

Question4:-Which of the following is correct about anchoring junctions between epithelial cells ?

- i. Links cytoskeleton of one cell to the adjacent cell
- ii. Interact both with actin and intermediate filaments
- iii. Seen on the lateral surface of cell
- iv. Not seen on the basal domain of the cell

A:-only i and ii are correct

B:-i, ii and iii are correct

C:-i, iii and iv are correct

D:-only ii and iv are correct

Correct Answer:- Option-B

Question5:-Which type of collagen is involved in Ehlers – Danlos type IV disease ?

A:-Type I

B:-Type II

C:-Type III

D:-Type IV

Correct Answer:- Option-C

Question6:-The most perfused zone in the hepatic acinus is

A:-Zone I

B:-Zone II

C:-Zone III

D:-Both 1 and 3

Correct Answer:- Option-A

Question7:-In the trachea, an elastic membrane forms a distinct boundary between

A:-Mucosa and lamina propria

B:-Lamina propria and submucosa

C:-Submucosa and cartilage plates

D:-Cartilage and adventitia

Correct Answer:- Option-B

Question8:-Macula pellucida on the germinal epithelium of ovary is seen over the

A:-Primordial follicle

B:-Primary follicle

C:-Secondary follicle

D:-Graafian follicle

Correct Answer:- Option-D

Question9:-Not true about space of Disse

A:-Lined by Ito cells

B:-Lined by endothelial cells

C:-Lined by hepatocytes

D:-Microvilli of hepatocytes project into it

Correct Answer:- Option-A

Question10:-Largest cell in seminiferous epithelium is

A:-Spermatogonia

B:-Primary spermatocytes

C:-Secondary spermatocytes

D:-Spermatids

Correct Answer:- Option-B

Question11:-Pharyngeal pouches fail to differentiate in DiGeorge syndrome are

A:-1<sup>st</sup> and 2<sup>nd</sup> arches

B:-2<sup>nd</sup> and 3<sup>rd</sup> arches

C:-3<sup>rd</sup> and 4<sup>th</sup> arches

D:-4<sup>th</sup> and 6<sup>th</sup> arches

Correct Answer:- Option-C

Question12:-Not a source of development of diaphragm

A:-Septum transversum

B:-Pleuropericardial membrane

C:-Dorsal mesentery of esophagus

D:-Muscular ingrowth from lateral body walls

Correct Answer:- Option-B

Question13:-Type II pneumocytes with numerous lamellar bodies are well developed in which stage of lung development ?

A:-Pseudoglandular stage

B:-Glandular stage

C:-Canalicular stage

D:-Terminal Sac stage

Correct Answer:- Option-D

Question14:-Percutaneous umbilical cord blood sampling is performed after \_\_\_\_\_ weeks of gestation.

A:-8

B:-12

C:-18

D:-24

Correct Answer:- Option-C

Question15:-Not true about Nitabuch's stria, it contains

A:-Hyrtl's anastomosis

B:-Areas of necrotic maternal decidua

C:-Cytotrophoblast

D:-Multinucleate trophoblast giant cells

Correct Answer:- Option-A

Question16:-Greater cornu of hyoid bone develops from

A:-First pharyngeal arch

B:-Second arch

C:-Third arch

D:-Fourth arch

Correct Answer:- Option-C

Question17:-The circumvallate papillae in the tongue are innervated by \_\_\_\_\_ nerve of \_\_\_\_\_ arch.

A:-Glossopharyngeal nerve of fourth arch

B:-Vagus nerve of sixth arch

C:-Glossopharyngeal nerve of third arch

D:-Chorda tympani nerve of second arch

Correct Answer:- Option-C

Question18:-Olfactory epithelium develops from

A:-Ectoderm

B:-Neural crest

C:-Endoderm

D:-Mesoderm

Correct Answer:- Option-A

Question19:-All are derivatives of neural crest cells except

A:-Cranial and sensory ganglia

B:-Pharyngeal arch cartilages

C:-Retina

D:-Bulbar and conal ridges in heart

Correct Answer:- Option-C

Question20:-By the middle of the third week of intrauterine development, intraembryonic mesoderm separates the ectoderm and endoderm at

A:-The oropharyngeal membrane

B:-The median plane cranial to the primitive node

C:-The cloacal membrane

D:-The primitive streak

Correct Answer:- Option-D

Question21:-All are autosomal recessive disorders except

A:-Occulocutaneous albinism

B:-Maple syrup urine disease

C:-Alkaptonuria

D:-Neurofibromatosis

Correct Answer:- Option-D

Question22:-Which Mendel's first law of inheritance explains the expression of characters in the subsequent generation without its appearance in the first generation when contrasting characters are crossed ?

A:-The law of segregation

B:-The law of uniformity

C:-The law of independent assortment

D:-None of the above

Correct Answer:- Option-B

Question23:-Not true about Fragile X syndrome

A:-It is a single gene disorder due to a dynamic mutation in X chromosome

B:-More common in males than females

C:-4 - 8% males with learning disability and micro-orchidism

D:-For a woman who carries a full mutation there is a 50% risk that each of her sons will be affected with the full syndrome

Correct Answer:- Option-C

Question24:-Good quality metaphase preparations from solid tumors are best obtained by

A:-Whole-Chromosome Paint Probes

B:-FISH

C:-Comparative Genomic Hybridization

D:-Chromosome-specific Unique-sequence Probes

Correct Answer:- Option-C

Question25:-All are infectious teratogenic agents producing chorioretinitis except

A:-Cytomegalovirus

B:-Herpes simplex virus

C:-Toxoplasma Gondi

D:-Varicella zoster

Correct Answer:- Option-B

Question26:-Segmental innervation of triceps is by

A:-C<sub>8</sub>

B:-T<sub>1</sub>

C:-C<sub>6</sub>

D:-C<sub>7</sub>

Correct Answer:-**Question Cancelled**

Question27:-Example of a uniaxial joint

A:-Pivot joint

B:-Ellipsoid joint

C:-Saddle joint

D:-Spheroidal joint

Correct Answer:- Option-A

Question28:-Oblique cord is the degenerated primitive origin of

- A:-Flexor digitorum profundus
- B:-Flexor pollicis longus
- C:-Flexor digitorum superficialis
- D:-Supinator

Correct Answer:- Option-B

Question29:-Congenital condition where little finger is fixed in flexed position

- A:-Clinodactyly
- B:-Carpodactyly
- C:-Syndactyly
- D:-Polydactyly

Correct Answer:-**Question Cancelled**

Question30:-Lateral epiphyseal arteries of Hip joint are branches of

- A:-Obturator artery
- B:-Superior gluteal artery
- C:-Inferior gluteal artery
- D:-Medial Circumflex femoral artery

Correct Answer:- Option-D

Question31:-Posterior tibial recurrent artery is a branch of

- A:-Medial malleolar artery
- B:-Lateral malleolar artery
- C:-Anterior tibial artery
- D:-Dorsalis pedis artery

Correct Answer:- Option-C

Question32:-Angulation do not occur in

- A:-Flexion
- B:-Extension
- C:-Adduction
- D:-Gliding

Correct Answer:- Option-D

Question33:-Segmental innervation of wrist joint

- A:- $C_6 - C_7$
- B:- $C_5 - C_6$
- C:- $C_7 - C_8$
- D:- $C_8 - T_1$

Correct Answer:- Option-A

Question34:-Calcar femorale arises from

A:-Adductor tubercle

B:-Tension lamellae

C:-Linea aspera

D:-Compression lamellae

Correct Answer:- Option-C

Question35:-Axial line of hand passes through

A:-Capitate

B:-Hamate

C:-Lunate

D:-Trapezium

Correct Answer:- Option-A

Question36:-Lateral rotation of flexed leg is by

A:-Quadriceps femoris

B:-Popliteus

C:-Biceps femoris

D:-Tensor fascia lata

Correct Answer:- Option-C

Question37:-Thickest articular cartilage in the body is for

A:-Patella

B:-Tibia

C:-Femur

D:-Radius

Correct Answer:- Option-A

Question38:-Distal wing tendon is

A:-Palmar and dorsal interossei

B:-Lumbricals

C:-Extensor digitorum

D:-Extensor indicis

Correct Answer:- Option-B

Question39:-Bankart's lesion is due to

A:-Thickening of supraspinatus

B:-Tear in anteroinferior part of glenoid labrum

C:-Laxity of fibrous capsule

D:-Frozen shoulder

Correct Answer:- Option-B

Question40:-Axillary arch extends between Latissimus dorsi and

A:-Pectoralis major

B:-Pectoralis minor

C:-Deltoid

D:-Trapezius

Correct Answer:- Option-A

Question41:-Which is true regarding Coronary arteries ?

A:-Alpha receptors are predominant in epicardial vessels

B:-Alpha receptors are predominant in intra muscular arteries

C:-Blood flows through coronary arteries in systole

D:-Anatomically, coronary arteries are end arteries

Correct Answer:- Option-A

Question42:-Sinu-atrial node was discovered by

A:-Keith and Flack

B:-Tawara

C:-Purkinje

D:-HIS

Correct Answer:- Option-A

Question43:-First rib do not move in quiet respiration because

A:-First chondrosternal joint is a primary cartilaginous joint

B:-First chondrosternal joint is a secondary cartilaginous joint

C:-First chondrosternal joint is a fibrous joint

D:-First chondrosternal joint is a synovial joint

Correct Answer:- Option-A

Question44:-Bucket handle movement of ribs permit

A:-Up and down gliding movements at costo transverse joints

B:-Hinge movements at membristernal joint

C:-Rotation at costo vertebral joints

D:-Rotation at costo transverse joints

Correct Answer:- Option-A

Question45:-Recent term for cardiac jelly

A:-Myoepicardial reticulum

B:-Extra cellular matrix of heart

C:-Gelatinous reticulum

D:-Myocardial basement membrane



Correct Answer:- Option-D

Question46:-Non ciliated cells in trachea and bronchi are all except

A:-Goblet cell

B:-Clara cell

C:-Columnar cell

D:-Brush cell

Correct Answer:- Option-C

Question47:-Inter alveolar pores of Kohn has all features except

A:-Upto 7 pores per alveolus present

B:-Lined by type I alveolar cells

C:-Pore size range from 2-13  $\mu$  m

D:-They are routes for migration of alveolar macrophages

Correct Answer:- Option-B

Question48:-Which is false regarding bronchoscopy ?

A:-Can acquire samples by bronchial lavage, Bronchial brushing and bronchial biopsies

B:-Provide information about staging of lung cancers

C:-Facilitates therapeutic procedures like ablation of tumors, foreign body removal etc.

D:-Allows direct visualization of trachea and major airways as far as second division of subsegmental airway

Correct Answer:- Option-D

Question49:-Mediastinum is developed from

A:-Septum transversum

B:-Primitive ventral and dorsal meso oesophagus

C:-Dorsal mesocardium

D:-Pleura

Correct Answer:- Option-B

Question50:-Thymic vein do not drain into

A:-Left brachiocephalic vein

B:-Internal thoracic vein

C:-Inferior thyroid vein

D:-Azygos vein

Correct Answer:- Option-D

Question51:-Station three mediastinal lymph node is

A:-Lower para tracheal

B:-Upper para tracheal

C:-Prevascular and retrotracheal

D:-Where left brachiocephalic vein crosses trachea

Correct Answer:- Option-C

Question52:-Which of the following mitral chordae do not branch ?

A:-Commissural chordae

B:-Strut chordae

C:-Rough zone chordae

D:-Basal chordae

Correct Answer:- Option-D

Question53:-Right bronchial artery is a branch of

A:-Third posterior intercostal artery

B:-Thoracic aorta

C:-Inferior thyroid artery

D:-Internal thoracic artery

Correct Answer:- Option-A

Question54:-Most common site of ventricular septal defect

A:-In the right wall of aortic vestibule below the commissure between non coronary and right coronary cusps of aortic valve

B:-In ventricular outflow tracts roofed by conjoined facing cusps of aortic and pulmonary valves

C:-Within the musculature of ventricular septum

D:-Defects within the inlet part of ventricular septum

Correct Answer:- Option-A

Question55:-Suppressed bronchopulmonary segment in left lung is

A:-Anterior basal segment

B:-Posterior basal segment

C:-Medial basal segment

D:-Lateral basal segment

Correct Answer:- Option-C

Question56:-Which of the following is not a content of Calot's triangle ?

A:-Cystic artery

B:-Cystic duct

C:-Right hepatic artery

D:-Cystic node of lund

Correct Answer:- Option-B

Question57:-Which of the following is the most dangerous position of the vermiform appendix ?

A:-Retrocaecal

B:-Pelvic

C:-Preileal

D:-Post ileal

Correct Answer:- Option-C

Question58:-Which among the following is not related to transpyloric plane ?

A:-Hilum of kidney

B:-Fundus of gallbladder

C:-Lower end of spinal cord

D:-Origin of splenic artery

Correct Answer:- Option-D

Question59:-Choose the correct statement regarding Uncinate process of pancreas.

A:-Hook shaped process from neck of pancreas

B:-It develops from dorsal pancreatic bud

C:-It lies between superior mesenteric vessels and IVC

D:-Accessory pancreatic duct receives its secretion

Correct Answer:- Option-D

Question60:-Choose the correct statement regarding Meckel's diverticulum

A:-Remnant of allantois

B:-Present at ileo caecal junction

C:-May contains gastric and pancreatic mucosa

D:-Present in 5% of individuals

Correct Answer:- Option-C

Question61:-Which of the following statement is incorrect regarding the Trigone of urinary bladder ?

A:-Developed from distal end of mesonephric duct

B:-No mucosal folds

C:-Rich in nerve supply

D:-Detrusor muscle is replaced by muscle of bell

Correct Answer:- Option-D

Question62:-Which of the following branch of lumbar plexus emerges at the medial border of psoas major ?

A:-Obturator nerve

B:-Genitofemoral nerve

C:-Femoral nerve

D:-Iliohypogastric nerve

Correct Answer:- Option-A

Question63:-Appendix of testis is the remnant of

- A:-Cranial end of wolffian duct
- B:-Cranial end of Mullerian duct
- C:-Mesonephric tubules
- D:-Pronephric tubules

Correct Answer:- Option-B

Question64:-All of the following are the muscular element of perineal body except

- A:-External anal sphincter
- B:-Ischiocavernosus
- C:-Bulbospongiosus
- D:-Levator ani

Correct Answer:- Option-B

Question65:-Prepyloric vein is a communication between which of the following veins

- A:-Right gastric and left gastric
- B:-Right gastroepiploic and left gastroepiploic vein
- C:-Right gastric and right gastroepiploic
- D:-Left gastric and left gastroepiploic

Correct Answer:- Option-C

Question66:-Following are the boundaries of Hessel bach's triangle except

- A:-Medial umbilical ligament
- B:-Inguinal ligament
- C:-Rectus abdominis
- D:-Inferior epigastric artery

Correct Answer:- Option-A

Question67:-Which of the following statement is incorrect regarding white line of Hilton in anal canal ?

- A:-It indicates lower end of internal anal sphincter
- B:-It is a muco cutaneous junction
- C:-Above this line develops from endoderm and below from ectoderm
- D:-Below this line is supplied by inferior rectal nerve

Correct Answer:- Option-C

Question68:-Which lobe of prostate is commonly affected by cancers ?

- A:-Median lobe
- B:-Posterior lobe

C:-Anterior lobe

D:-Lateral lobe

Correct Answer:- Option-B

Question69:-Choose the correct statement regarding ganglion impar.

A:-A parasympathetic ganglion

B:-Situating in front of the sacrum

C:-It is unpaired

D:-Contains pseudounipolar neurons

Correct Answer:- Option-C

Question70:-Which of the following is not forms the boundary of Epiploic foramen ?

A:-Lesser omentum

B:-Inferior vena cava

C:-1<sup>st</sup> part of duodenum

D:-Caudate lobe of liver

Correct Answer:- Option-D

Question71:-Renal angle is lies between

A:-12<sup>th</sup> rib and medial border of erector spinae

B:-12<sup>th</sup> rib and lateral border of erector spinae

C:-12<sup>th</sup> rib and medial border of quadratus lumborum

D:-None of the above

Correct Answer:- Option-B

Question72:-Which of the following lymph node is not received the lymphatics from uterine cervix ?

A:-Sacral

B:-Superficial inguinal

C:-External iliac

D:-Internal iliac

Correct Answer:- Option-B

Question73:-Which of the following statement is incorrect regarding ductus venosus ?

A:-It is a connection between umbilical vein and IVC

B:-Its remnant is ligamentum venosum after birth

C:-It is situated at left side of caudate lobe

D:-It carries deoxygenated blood

Correct Answer:- Option-D

Question74:-Which of following nerve is not carrying sympathetic fibres ?

A:-Greater splanchnic nerve

B:-Lesser splanchnic

C:-Lumbar splanchnic

D:-Pelvic splanchnic

Correct Answer:- Option-D

Question75:-Which of the following is not a boundary of ovarian fossa ?

A:-Obturator nerve

B:-Ureter

C:-Obliterated umbilical artery

D:-Internal iliac artery

Correct Answer:- Option-A

Question76:-Extrinsic part of orbicularis oris is derived from the following muscle except

A:-Levator anguli oris

B:-Levator labii superioris

C:-Risorius

D:-Zygomaticus minor

Correct Answer:- Option-C

Question77:-Which of the following nerve carries secretomotor parasympathetic fibres to lacrimal gland ?

A:-Greater petrosal

B:-Lesser petrosal

C:-Deep petrosal

D:-Tympanic branch of IX cranial nerve

Correct Answer:- Option-A

Question78:-Choose the incorrect statement regarding parathyroid gland.

A:-Superior parathyroid lies between true and false capsule of thyroid gland

B:-Inferior thyroid is seen ventral to recurrent laryngeal nerve

C:-Oxyphil cells are increased with age

D:-Superior and inferior glands are developed from 3<sup>rd</sup> and 4<sup>th</sup> pharyngeal pouches respectively

Correct Answer:- Option-D

Question79:-The transparency of cornea is due the following factors except

A:-Smoothness of epithelium

B:-Absence of fibroblast cells

C:-Absence of blood vessels

D:-Uniform organization of collagen fibres

Correct Answer:- Option-B

Question80:-Which is the 1<sup>st</sup> branch of external carotid artery ?

- A:-Superior thyroid artery
- B:-Ascending pharyngeal artery
- C:-Facial artery
- D:-Lingual artery

Correct Answer:- Option-B

Question81:-Which of the following muscle forms the oral diaphragm ?

- A:-Hyoglossus
- B:-Genioglossus
- C:-Geniohyoid
- D:-Mylohyoid

Correct Answer:- Option-D

Question82:-Choose the correct statement regarding extraocular muscles.

- A:-All recti muscles are inserted into sclera behind equator
- B:-Lateral rectus is supplied by trochlear nerve
- C:-Insertion of medial rectus is nearest to limbus than other recti
- D:-All muscles receives nerve supply from its ocular surface

Correct Answer:- Option-C

Question83:-Branches of the following arteries are included in kieselbach plexus in nasal septum

- A:-Ophthalmic
- B:-Lingual
- C:-Facial
- D:-Maxillary

Correct Answer:-**Question Cancelled**

Question84:-Thyroid cartilage is a derivative of which of the following pharyngeal arch ?

- A:-1<sup>st</sup>
- B:-2<sup>nd</sup>
- C:-3<sup>rd</sup>
- D:-4<sup>th</sup>

Correct Answer:- Option-D

Question85:-Which of the following is the continuation of Posterior longitudinal ligament of vertebrae ?

- A:-Membrana tectoria
- B:-Apical ligament

C:-Alar ligament

D:-Transverse ligament of atlas

Correct Answer:- Option-A

Question86:-Tegmen tympany of petrous temporal bone forms the roof of following cavities except

A:-Auditory tube

B:-Middle ear

C:-Canal for tensor tympany

D:-Mastoid antrum

Correct Answer:- Option-A

Question87:-Enamel of tooth develops from the following cell

A:-Odontoblast

B:-Osteoblast of maxilla and mandible

C:-Chondroblast

D:-Ameloblast

Correct Answer:- Option-D

Question88:-Which among the following muscle is the tensor of vocal cord ?

A:-Posterior cricoarytenoid

B:-Lateral cricoarytenoid

C:-Thyroarytenoid

D:-Cricothyroid

Correct Answer:- Option-D

Question89:-Which among the following is the true statement regarding soft palate ?

A:-All muscles are supplies by pharyngeal plexus

B:-Taste sensation is carried through lesser palatine nerve

C:-Paralysis of muscles of one side causes deviation of uvula to same side

D:-Musculus uvula is an unpaired muscle

Correct Answer:- Option-B

Question90:-Danger space of neck lies between

A:-Prevertebral and alar layer of cervical fascia

B:-Buccopharyngeal and alar fascia

C:-Buccopharyngeal and pharyngobasilar fascia

D:-Pretracheal and prevertebral fascia

Correct Answer:- Option-A

Question91:-Most simple form of spinabifida



A:-Meningocele

B:-Meningomyelocele

C:-Spina bifida occulta

D:-Rachis chisis

Correct Answer:- Option-C

Question92:-Inferior continuation of pia mater of spinal cord

A:-Linea splendens

B:-Filum terminale

C:-Ligamentum denticulata

D:-Conus medullaris

Correct Answer:- Option-B

Question93:-Number of layers or laminae present in the grey matter of lateral geniculate body.

A:-3

B:-4

C:-9

D:-6

Correct Answer:- Option-D

Question94:-The junction of coronal suture and sagittal suture is called

A:-Lambda

B:-Bregma

C:-Inion

D:-Asterion

Correct Answer:- Option-B

Question95:-The functional component of taste sensations carried by glossopharyngeal nerve is

A:-General somatic afferent

B:-Special somatic afferent

C:-Special visceral afferent

D:-Special visceral efferent

Correct Answer:- Option-C

Question96:-Which of the following is not a component of Papez circuit ?

A:-Mammillary body

B:-Amygdala

C:-Cingulate gyrus

D:-Hippocampal formation

Correct Answer:- Option-B

Question97:-Which of the following is concerned with pupillary light reflex ?

A:-Pretectal nucleus

B:-Superior colliculus

C:-EWN (Edinger Westphal Nucleus)

D:-Red nucleus

Correct Answer:- Option-A

Question98:-Which of the following is an example of complete sulcus of cerebral cortex ?

A:-Lateral sulcus

B:-Cingulate sulcus

C:-Calcarine sulcus

D:-Central sulcus

Correct Answer:- Option-C

Question99:-The efferent fibres from cerebellum is constituted by

A:-Axons of Purkinje cells

B:-Axons of basket cells

C:-Axons of stellate cells

D:-Axons of granule cell

Correct Answer:- Option-A

Question100:-Agranular cortex is the characteristic feature of which area ?

A:-Sensory area

B:-Association area

C:-Motor area

D:-All of the above

Correct Answer:- Option-C