PROVISIONAL ANSWER KEY

Question 121/2024/OL

Paper Code:

Category 292/2023

Code:

Exam: Assistant Professor in Oral Pathology and Microbiology

Date of Test 26-11-2024

Department Kerala Medical Education Service

Question1:-The tooth buds for the permanent dentition is to appear normally about the third month. On which aspect of primary teeth it should appear and develop to avoid a possible developmental Anomaly?

A:-Buccal Aspect

B:-Inferior Aspect

C:-Lingual Aspect

D:-None of the above

Correct Answer:- Option-C

Question2:-A median cleft of the upper lip probably represents

A:-the failure of the primordia of the median nasal process to fuse into a single globular process

B:-the failure of the lateral nasal processes and median nasal process to coalesce

C:-the anomalies in size, shape or position of facial processes

D:-the result of pressure from the tip of tongue pressing against the over large prolabium

Correct Answer:- Option-A

Question3:-A cyst which classically moves during swallowing or on protrusion of tongue is

A:-Plunging ranula

B:-Median Sublingual Epidermoid Cyst

C:-Thyroglossal duct cyst

D:-Cystic hygroma

Correct Answer: - Option-C

Question4:-Defeciencies of the tongue musculature such as Microglossia may be the result of

A:-the disturbance in migration of mesoderm into developing tongue epithelium

B:-the disturbances which may occur when the path of migration of the derived muscle groups is long

C:-failure of the mesoderm to imperforate into the choanal membrane

D:-failure in morphological differentiation by genetic and environmental influences

Correct Answer:- Option-B

Question5:-A developmental cyst that possibly develop from the remnants of the embryonic nasolacrimal rod is

A:-Globulo maxillary cyst

B:-Nasopalatine duct cyst

C:-Nasolabial cyst

D:-Uni cameral bone cyst

Correct Answer:- Option-C

Question6:-Nevoid basal cell carcinoma syndrome is caused by mutation of

A:-PTCH gene; chromosome 9q22.3-q31

B:-PTCH gene; chromosome 9q22.1-q31

C:-PTCH gene; chromosome 9q22.3-q32

D:-PTCH gene; chromosome 9q22.1-q32

Correct Answer:- Option-A

Question7:-Immunohistochemical studies on Desmoplastic pattern of Ameloblastoma have shown an increased production of which of the following cytokines?

A:-Fibroblast Growth Factor (FGF)

B:-Transforming Growth Factor-beta (TGF-β)

C:-Platelet-Derived Growth Factor (PDGF)

D:-Interferon-gamma (IFN-γ)

Correct Answer:- Option-B

Question8:-Which of the following statements is/are incorrect about calcifying epithelial odontogenic tumour (CEOT)?

- (i) About 2/3rd of all reported cases have been found in the mandible.
- (ii) Radiographically, the unilocular pattern is commonly encountered in the maxilla.
- (iii) The tumour is frequently associated with an impacted tooth, most often a mandibular

molar.

(iv) The margins of the lytic defects are often scalloped.

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

B:-(ii) and (iv)

C:-Only (ii)

D:-All are correct statements

Correct Answer: - Option-D

Question9:-Which of the following statements is incorrect about a dentigerous cyst?

- A:-Dentigerous cyst account for about 20% of all epithelium-lined cysts of the jaws
- B:-They are discovered most frequently in patients between 10 and 30 years of age
- C:-The lining of dentigerous cyst can undergo neoplastic transformation to form an epidermoid carcinoma
 - D:-Dentigerous cyst is the most common odontogenic cyst

Correct Answer:- Option-D

Question 10:-Which of the following statement is correct about Odontogenic Keratocyst (OKC)?

(i) OKC show significantly greater expression of PCNA and Ki67, especially in the suprabasilar

layer.

(ii) Over 85% of OKC associated with nevoid basal cell carcinoma syndrome show mutation of

PTCH1 gene.

(iii) Loss of heterozygosity for various tumour suppressor genes like FHIT, LATS2 are seen

OKC.

A:-Only (ii) is correct

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

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

D:-(ii) and (iii) are correct

Correct Answer:- Option-B

Question11:-Which of the following is not a major diagnostic criterion for the Gorlin syndrome?

A:-First degree relative with the Gorlin syndrome

B:-Lamellar calcification of the falx cerebri

C:-Preaxial or postaxial polydactyly

D:-One or more basal cell carcinoma before the age of 30

Correct Answer:- Option-C

Question12:-EWSR1 gene mutations are commonly found in

A:-Unicystic ameloblastoma

B:-Clear cell odontogenic carcinoma

C:-Ameloblastic fibro-odontoma

D:-Odontogenic myxoma

Correct Answer:- Option-B

Question13:-'Stepladder' pattern is seen in the radiographic picture of

A:-Odontogenic myxoma

- B:-Odontogenic fibroma
- C:-Odontoameloblastoma
- D:-Ameloblastic fibro-odontoma

Correct Answer:- Option-A

Question14:-Cannons disease is inherited as

- A:-Autosomal dominant trait
- B:-Autosomal recessive trait
- C:-X-linked recessive trait
- D:-X-linked dominant trait

Correct Answer:- Option-A

Question15:-Cell within a cell phenomenon is seen in

- A:-Witkop-Von Sallmann syndrome
- B:-White sponge nevus
- C:-Cole-Engmann syndrome
- D:-Keratosis follicularis

Correct Answer:- Option-A

Question16:-STK11 gene mutation is responsible for most cases of

- A:-Tuberous sclerosis
- B:-Osler-Weber-Rendu syndrome
- C:-Peutz-Jeghers syndrome
- D:-Ehlers-Danlos syndromes

Correct Answer:- Option-C

Question17:-The direct immunofluorescence studies of mucous membrane pemphigoid shows

- A:-Positive-intercellular
- B:-Positive-intercellular and basement membrane zone
- C:-Positive-basement membrane zone
- D:-ls nondiagnostic

Correct Answer:- Option-C

Question18:-Paraneoplastic pemphigus affects patients who have a neoplasm, usually

- A:-Acute lymphocytic leukaemia
- B:-Acute myeloid leukaemia
- C:-Chronic lymphocytic leukaemia
- D:-Chronic myeloid leukaemia

Correct Answer:- Option-C

Question19:-Osteitis fibrosa cystica is seen in A:-Cushing syndrome B:-Hyperparathyroidism C:-Addison disease D:-Graves disease Correct Answer:- Option-B Question 20:- Which of the following statement is incorrect about Giant cell arteritis? A:-It is an immune mediated vasculitis B:-It commonly affects the medium-sized and larger arteries C:-The deep temporal artery is the most commonly affected site D:-Leads to vascular occlusion and ischemia Correct Answer: - Option-C Question21:-The common causative organism of cellulitis is A:-Streptococci B:-Staphylococci C:-Pseudomonas D:-Enterococcus Correct Answer:- Option-A Question22:-Which of the following tissue is radioresistant? A:-Salivary gland B:-Bone marrow C:-Lense of eye D:-Thyroid Correct Answer:- Option-D Question23:-Acrodynia is A:-Bismuth toxicity **B:-Mercury toxicity** C:-Gold toxicity D:-Silver toxicity Correct Answer: - Option-B Question24:-Bronze diabetes is seen in; A:-Iron overload B:-Copper overload C:-Zinc overload D:-Manganese overload

Correct Answer:- Option-A

Question25:-The iron requirement of an adult female is approximately A:-10 mg/day B:-20 mg/day C:-30 mg/day D:-40 mg/day Correct Answer:- Option-B Question26:-Following are the hamartomatous lesions of the oral cavity EXCEPT A:-Odontome B:-Heamangioma C:-Lymphangioma D:-Fibroma Correct Answer: - Option-D Question27:-Microscopic feature exhibiting the presence of 'Koilocytes' in the superficial layer of epithelium is suggestive of A:-Squamous papilloma B:-Kerato accanthoma C:-Squamous accanthoma D:-Nevus Correct Answer: - Option-A Question28:-Which one of the following is considered as 'Mixed tumour' among the salivary gland tumours? A:-Canalicular adenoma B:-Oncocytoma C:-Basal cell adenoma D:-Pleomorphic adenoma Correct Answer:- Option-D Question29:-The tumour of smooth muscle origin is A:-Myoblastic myoma B:-Rhabdomyoma C:-Leiomyoma D:-Myofibroma Correct Answer:- Option-C

Question30:-The microscopic feature exhibiting 'Shredded carrot' like appearance, that are separated from the cells by mucoid material is a feature of

A:-Multiple endocrine neoplasia syndrome

B:-Neurofibroma

C:-Neurilemmoma

D:-Traumatic Neuroma

Correct Answer:- Option-B

Question31:-Following are the architectural changes observed in relation to the epithelial dysplasia EXCEPT

A:-Basal cell hyperplasia

B:-Loss of polarity

C:-Dyskeratosis

D:-Abnormal mitotic figures

Correct Answer:- Option-D

Question32:-High urinary excretion of vanillylmandelic acid (VMA) suggests

A:-Amelanotic melanoma

B:-Melanotic neuroectodermal tumour of infancy

C:-Melanoma

D:-Traumatic Neuroma

Correct Answer:- Option-B

Question33:-50 year old male patient presented with a dome shaped solitary nodule on vermillion border of lip with smooth shiny surface and central depressed crateriform ulceration or keratin plug is suggestive of

A:-Verruca vulgaris

B:-Verruciform xanthoma

C:-Kerato accanthoma

D:-Squamous accanthoma

Correct Answer:- Option-C

Question34:-Clinical feature 'Eye to heaven' appearance is found in

A:-Ossifying fibroma

B:-Fibrous dysplasia

C:-Paget's disease

D:-Cherubism

Correct Answer: - Option-D

Question35:-The synonym (other name) of Schwannoma is

A:-Melanoma

B:-Neurofibroma

C:-Neurilemmoma

D:-Traumatic Neuroma

Correct Answer: - Option-C

Question36:-The most common early sign the 'Coup de sabre' is a clinical feature found in

- A:-Melkersson-Rosenthal syndrome
- B:-Facial hemiatropy
- C:-Van der woude syndrome
- D:-Hemifacial hypertropy
- Correct Answer:- Option-B

Question37:-Microscopic feature exhibiting the tiny linear or arc shaped bodies, which are refractile and non birefringent hyaline bodies or Rushton bodies present in the epithelium of

- A:-Dentigerous cyst
- B:-Glandular odontogenic cyst
- C:-Radicular cyst
- D:-Odontogenic keratocyst
- Correct Answer:- Option-C

Question38:-Loss of neural crest cell precursors resulting in reduced number of neural crest cells migrating in to the developing craniofacial complex results in

- A:-Treacher collins syndrome
- B:-Cliedo cranial dysplasia
- C:-Crouzon disease
- D:-Parry Romberg syndrome
- Correct Answer:- Option-A

Question39:-Which of the following statement is CORRECT regarding the histopathological zones of dentinal caries

- A:-Proteolytic organisms are predominantly found in superficial layer of zone of microbial invasion
- B:-Pioneer bacteria predominantly found in deeper layers in advanced dentinal caries
- C:-Focal coalescence of adjacent tubules and ovoid area of destructionliquefaction foci is found in advanced dentinal caries
- D:-Fatty degeneration of odontoblastic process contribute to the permeability of dentin

Correct Answer:- Option-C

Question40:-Trench mouth refers to

- A:-Scurvy
- B:-Necrotizing ulcerative gingivitis
- C:-Oral submucous fibrosis
- D:-Condylar hypoplasia
- Correct Answer:- Option-B

Question41:-An occlusal radiograph reveal focal over growth of bone on the outer surface of the cortex as reduplication of the cortical layers of bone associated with

carious tooth is suggestive of

- A:-Garre's chronic non suppurative sclerosis osteomyelitis
- B:-Chronic diffuse sclerosing osteomyelitis
- C:-Chronic focal sclerosing osteomyelitis
- D:-Chronic suppurative osteomyelitis

Correct Answer:- Option-A

Question42:-Intra oral gumma most commonly involving the tongue or palate is a feature of

- A:-Syphilis
- B:-Tuberculosis
- C:-Leprosy
- D:-Noma

Correct Answer:- Option-A

Question43:-A multisystemic condition with oral manifestation 'strawberry gingivitis' is suggestive of

- A:-Midline lethal granuloma
- B:-Pyogenic granuloma
- C:-Wegener's granulomatosis
- D:-Chronic granulomatous disease

Correct Answer:- Option-C

Question44:-Localised or generalized infection caused by the dissemination of micro-organisms or toxic products from a focus of infection is referred to as

- A:-Focus of infection
- **B:-Focal infection**
- C:-Oral infection
- D:-Focal mucinosis

Correct Answer:- Option-B

Question45:-Tooth ache, experienced by astronauts, submarine crews and deep sea divers, some times associated with recent filling/restoration, is referred as

- A:-Aerodontalgia
- B:-Anachoretic pulpitis
- C:-Pulp hyperemia
- D:-Chronic hyperplastic pulpitis

Correct Answer:- Option-A

Question46:-The tongue exhibiting a white coating with oedematous and hyperaemic fungiform papilla, appearance of 'Strawberry tongue' is suggestive of

A:-Noma

- **B:-Measles**
- C:-Scarlet fever
- D:-Diptheria

Correct Answer:- Option-C

Question47:-Following are the synonyms (other name) of Candidiasis EXCEPT

- A:-Candidosis
- B:-Moniliais
- C:-Oral thrush
- D:-Oral myiasis

Correct Answer:- Option-D

Question 48:- The most accepted theory in etiology of dental caries

- A:-Proteolytic theory
- B:-Miller's chemoparasitic theory
- C:-Proteolytic chelation theory
- D:-Sucrose chelation theory

Correct Answer:- Option-B

Question49:-Which of the following statement is WRONG regarding Dental plaque?

- A:-Acquired pellicle is a thin deposit, which may be formed shortly after eruption on the exposed tooth surface
- B:-Salivary pellicle appears on tooth surface with in one minute after cleaning the tooth
 - C:-Salivary pellicle is visible and contains bacteria
- D:-Brown pigment on tooth surface is formed due to presence of tannins in the pellicle

Correct Answer:- Option-C

Question50:-Lesion that is less commonly associated with HIV is

- A:-Candidiasis
- B:-Nectrotizing ulcerative stomatitis
- C:-Hairy leukoplakia
- D:-Kaposis sarcoma

Correct Answer:- Option-B

Question51:-All of the following are involved in tumor metastasis cascade except

- A:-Fibronectin
- B:-E cadherin
- C:-Tyrosine kinase
- D:-Type IV Collagenase

Correct Answer:- Option-C

Question52:-Tumor suppressor genes implicated in human cancers include the follwing except
A:-Rb gene
B:-APC
C:-ERB-B
D:-TP53
Correct Answer:- Option-C
Question53:-Mycosis fungoides is
A:-B cell lymphoma
B:-T cell lymphoma
C:-Mixed
D:-Plasma cell tumor
Correct Answer:- Option-B
Question54:-Most common cancer arising in a patient with chronic osteomyelitis is
A:-Osteosarcoma
B:-Squamous cell carcinoma
C:-Fibrosarcoma
D:-Osteoid osteoma
Correct Answer:- Option-B
Question55:-Upregulation of which of the following has been noted on tumor cells which help them evade immune surveillance
A:-PD L1
B:-CTLA4
C:-CD28
D:-CD86
Correct Answer:- Option-A
Question56:-Which of following gene is translocated in Burkitt lymphoma
A:-FLI1
B:-PML
C:-MYC
D:-CCND1
Correct Answer:- Option-C
Question57:-The subtype of Rhabdomyosarcoma which frequently involves head and neck region is
A:-Pleomorphic
B:-Embryonal
C:-Spindle

D:-Alveolar Correct Answer:- Option-B Question58:-The most common primary site for cancer to metastasize to oral soft tissue A:-Prostate B:-Renal C:-Bone D:-Lung Correct Answer:- Option-D Question59:-Which cytokine is considered as most important myeloma growth factor A:-IL-6 B:-IL-3 C:-IL-7 D:-IL-11 Correct Answer:- Option-A Question60:-Hypothesis of dysfunctional cadherin - catenin complex important for intercellular adhesion is proposed for A:-Adenoid cystic carcinoma B:-Basal cell carcinoma C:-Spindle cell carcinoma D:-Pleomorphic adenoma Correct Answer:- Option-C Question61:-The following tumor is characterised by biphasic pattern of growth A:-Osteosarcoma B:-Osteochondroma C:-Synovial sarcoma D:-Malignant fibrous histiocytoma Correct Answer:- Option-C Question62:-E6 protein of high risk HPV affects the following protein there by promotes carcinogenesis A:-TP53 B:-APC C:-MDM2 D:-RB Correct Answer:- Option-A

Question63:-The precancerous lesion with highest malignant Potential is

A:-Nicotina palatinus in reverse smokers B:-Erythroleukoplakia C:-Actinic cheilosis D:-Smokeless tobacco keratosis Correct Answer:- Option-A Question64:-Herring bone pattern of fibrous tissue is found in A:-Fibrosarcoma B:-Malignant fibrous histiocytoma C:-Neurofibroma D:-Ameloblastic fibroma Correct Answer: - Option-A Question65:-Most common site for adenoid cystic carcinoma is A:-Parotid gland B:-Minor salivary glands C:-Submandibular gland D:-Sublingual gland Correct Answer:- Option-B Question66:-Degradation of extracellular matrix is brought about by following **EXCEPT** A:-Proteases B:-Free radicals C:-Metalloproteinase D:-Cathepsin D Correct Answer:- Option-B Question67:-All are methods of cell proliferation analysis EXCEPT A:-Flow cytometry B:-PCR C:-Microspectrophotometry D:-Immunohistochemistry Correct Answer:- Option-B Question68:-Most common clinicopathologic type of melanoma is A:-Nodular melanoma B:-Lentigo maligna melanoma C:-Acral lentiginous melanoma

D:-Superificial spreading melanoma

Correct Answer:- Option-D

Question69:-Nasopharyngeal carcinoma is caused by A:-HHV 4 B:-HHV 5 C:-HHV 7 D:-HHV 8 Correct Answer: - Option-A Question 70: - Hall mark mechanism of tumor suppressor gene Inactivation A:-Loss of heterozygosity B:-DNA hypermethylation C:-DNA hypomethylation D:-Histone deacetylation Correct Answer: - Option-A Question71:-In which phase of cell cycle does the nuclear envelope and nucleoli disappear? A:-Telophase B:-Prophase C:-Metaphase D:-Anaphase Correct Answer:- Option-B Question72:-Which of the following is used for visualizing live cells? A:-Scanning electron microscope B:-Con focal microscope C:-Phase contrast microscope D:-Transmission electron microscope Correct Answer:- Option-C Question73:-Resolving power of a microscope can be increased by A:-Increasing numerical aperture and using shorter wavelength light B:-Decreasing numerical aperture and using shorter wavelength light C:-Increasing numerical aperture and using longer wavelength light D:-Decreasing numerical aperture and using longer wavelength light

Question74:-The mass of a bacterial cell wall can be best assessed by which of the following?

A:-Interference microscope

Correct Answer:- Option-A

B:-Con focal microscope

C:-Phase contrast microscope

D:-Stereo microscope

Correct Answer:- Option-A

Question75:-Which of the following combination of statements is true of ELISA?

- (i) Uses antibodies labelled with enzymes
- (ii) Color change indicates presence of target antigen
- (iii) It is not possible to use monoclonal antibodies
- (iv) Technique does not need separation of free and bound antigens
 - A:-(i) and (iii)
 - B:-(ii) and (iii)
 - C:-(i) and (ii)
 - D:-(i) and (iv)

Correct Answer:- Option-C

Question76:-Which stain is best suited to demonstrate elastic tissue?

- A:-Giemsa stain
- B:-PAS stain
- C:-Silver impregnation
- D:-Verhoeff's stain

Correct Answer:- Option-D

Question77:-Amyloid demonstrated by Congo Red, emits apple green birefringence when viewed under

- A:-Polarizing light microscope
- B:-Phase contrast microscope
- C:-Interference microscope
- D:-Con focal microscope

Correct Answer:- Option-A

Question 78:- The specificity of an antibody is due to

- A:-Its valency
- B:-The heavy chains
- C:-The Fc portion of the molecule
- D:-The variable portion of the heavy and light chain

Correct Answer: - Option-D

Question 79:-Which of the following chemicals is used for colour restoration of museum specimens?

- A:-Ethanol
- B:-Formic acid
- C:-Methylated spirit
- D:-Hydrogen peroxide

Correct Answer:- Option-C

Question80:-Which among the following can best demonstrate epithelial mucins?

A:-Giemsa stain

B:-PAS stain

C:-Mucicarmine stain

D:-Methyl violet stain

Correct Answer:- Option-C

Question81:-Which of the following statement is incorrect about the features of Coronavirus?

A:-Non-Enveloped RNA virus

B:-Enveloped RNA virus

C:-Distributed around the world

D:-Transmitted from person to person

Correct Answer:- Option-A

Question82:-During the process of fixation all of the objectives are met EXCEPT

A:-Facilitates staining

B:-Facilitates autolysis

C:-Coagulates proteins

D:-Prevents putrefaction

Correct Answer:- Option-B

Question83:-What is the ratio of the volume of fixative to tissue in tissue processing?

A:-1:10

B:-10:1

C:-3:1

D:-1:3

Correct Answer:- Option-B

Question84:-Which of the following statement is incorrect about polycythemia?

A:-Low blood viscosity

B:-High hemocrit value

C:-High blood pressure

D:-Increase blood volume

Correct Answer:- Option-A

Question85:-The process by which the recombinant DNA is introduced into the recipient host cell is termed

A:-Translation

B:-Transcription

- C:-Transformation
- D:-Splicing

Correct Answer:- Option-C

Question86:-Which among the following is not a natural compound used in histopathology?

- A:-Alizarin
- B:-Eosin
- C:-Hematoxylin
- D:-Canada Balsam

Correct Answer:- Option-B

Question87:-During heating in PCR procedure which enzyme prevents denaturation of enzymes?

- A:-Taq polymerase
- **B:-DNA** polymerase
- C:-Restriction endonuclease
- D:-Restriction exonuclease

Correct Answer: - Option-A

Question88:-Which cell organelle conserves DNA for the longest period?

- A:-Nucleus
- B:-Endoplasmic reticulum
- C:-Mitochondria
- D:-Nucleoli

Correct Answer:- Option-C

Question89:-The following procedure is not a step, in cell culture procedure

- A:-Thawing
- **B:-Quenching**
- C:-Cell seeding
- D:-Cell detachment

Correct Answer:- Option-B

Question 90:- HLA complex of genes on chromosome 6 encodes for which proteins?

- A:-Cytoplasmic proteins
- B:-Transmembrane proteins
- C:-Nuclear membrane proteins
- D:-Cell surface proteins

Correct Answer:- Option-D

Question91:-The following agents are used for freezing sections for cryostat EXCEPT

- A:-Dry ice
- B:-Liquid nitrogen
- C:-Carbon dioxide Gas
- D:-Liquid paraffin

Correct Answer:- Option-D

Question92:-Which method is used for the accurate assessment/quantification of DNA content in cells?

- A:-Transmission Electron microscopy
- B:-Flow cytometry
- C:-PCR technique
- D:-In situ hybridisation

Correct Answer:- Option-B

Question93:-"Court strictures Vis-a-Vis Medical Officer" is based on disapproval of some aspect, before the court of law

- (i) Conduct of witness
- (ii) Adequate qualification
- (iii) Medical evidence
- (iv) Scientific facts
 - A:-Only (i) is correct
 - B:-Only (iii) is correct
 - C:-(i) and (ii) are correct
 - D:-(iii) and (iv) are correct

Correct Answer:- Option-A

Question94:-Developing teeth, the apposition of dentine and enamel take place at the approximate rate/day is

- A:-0.002 microns
- B:-20 microns
- C:-4 microns
- D:-100 microns

Correct Answer:- Option-C

Question95:-Tests useful for "Saliva" along with baccal epithelial cells" in alleged crime cases are

- (i) RNA based assays
- (ii) Absorption elution test
- (iii) Phadebas test
- (iv) Getller's test
 - A:-(ii) and (iv) are correct
 - B:-(i) and (iii) are correct

- C:-(iii) and (iv) are correct
- D:-(ii) and (iii) are correct

Correct Answer:- Option-B

Question96:-Following are the causes of ring fracture of skull

- (i) Fall from height landing on feet
- (ii) Forceful blow on forehead
- (iii) Sudden violent rotation of body on cervical spine
- (iv) Forceful blow on chin
 - A:-(ii) and (iii) are correct
 - B:-(ii) and (iv) are correct
 - C:-(i) and (iii) are correct
 - D:-(i) and (iv) are correct

Correct Answer:- Option-D

Question97:-Which of the following is NOT a component of a standard PCR reaction mixture?

- A:-Template DNA
- **B:-Primers**
- C:-Tag DNA polymerase
- D:-Restriction enzymes

Correct Answer:- Option-D

Question 98:-Which of the following is not used as a vector in recombinant DNA technology?

- A:-Eco RI
- B:-Cosmid
- C:-M13 phage
- D:-YAC

Correct Answer:- Option-A

Question99:-The term pleuripotency indicates

- A:-The ability of a cell to differentiate into all cell types of the body
- B:-The ability of a cell to differentiate into any cell types of a specific lineage
- C:-The ability of a cell to self-renew and produce more stem cells
- D:-The ability of a cell to differentiate into only one specific cell type

Correct Answer:- Option-B

Question100:-The total possible number of reading frames present in a DNA molecule is

- A:-Two
- B:-Four

C:-Six

D:-Three

Correct Answer:- Option-C