# SEAL

## MDS Entrance Test - 2013 QUESTION BOOKLET

Paper - I (Pre-Clinical & Para-Clinical)

Maximum Time Allowed : 2 hours		No. of Questions Maximum Marks	
Roll No.	Answer Sheet No.		

#### **INSTRUCTIONS**

#### PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- Check the booklet thoroughly: In case of any defect Misprint, Missing Question(s) or duplication of question(s)/ Page(s) get the booklet changed with the booklet of the same series from the Room Invigilator. No complaint shall be entertained after the entrance test.
- 2. Write your Roll Number and Answer Sheet No. in the space provided on the Question Booklet and on the OMR Answer Sheet. Incomplete and/or incorrect particulars will result in the non-evaluation of your answer sheet.
- 3. Strictly follow the instructions given by Centre Supervisor / Room Invigilator and those given on the Question Booklet.
- 4. Candidates are not allowed to carry any papers, notes, books, calculators, mobile phones, scanning devices etc. in the Examination Hall. Any candidate found using or in possession of such unauthorized material or indulging in copying or impersonation or adopting unfair means / reporting late / without Admit Card will be debarred from the Written Test.
- Use ONLY blue/black ball point pen for darkening the circles on the OMR Answer Sheet. Use of eraser, whitener (fluid)
  and cutting on the OMR Answer Sheet is not allowed.
- 6. The test is of objective type containing multiple choice questions (MCQs). Each objective question is followed by four responses. Choose the correct/best response and mark your response on the OMR Answer Sheet and not in the Question Booklet.
- 7. Completely darken the CIRCLE so that the number inside the CIRCLE is not visible as shown in the example below.

1 ● 3 4 1 ♥ 3 4/1 ♥ 3 4/1 ♥ 3 4/1 ● 3 ●

Wrong Methods

- 8. Darken ONLY ONE CIRCLE for each answer. If you darken more than one circle, it will be treated as a wrong answer.
- 9. Mark answer only in the space provided. DO NOT make any stray mark anywhere on the OMR Answer Sheet. DO NOT fold or wrinkle the OMR Answer Sheet. Rough work MUST NOT be done on the answer sheet. Use your question booklet for this purpose.
- 10. Candidates are provided carbonless OMR Answer Sheet (optical mark reader answer sheet) having original copy and candidate's copy. After completing the examination candidates are directed to fold at perforation at the top of sheet, tear it to separate original copy and candidate's copy and then hand over the original copy of OMR Answer Sheet to the Room Invigilator and take candidate's copy with them.

DO NOT OPEN THE SEAL OF THIS BOOKLET UNTIL TOLD TO DO SO

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Correct Method

#### Rough Work

## Paper - I (Pre-Clinical & Para-Clinical)

- All of the immunohistochemical markers are positive in the neoplastic cells of granulocytic sarcoma except
  - 1. CD 45 RO
- 2. myeloperoxidase
- 3. CD 43
- 4. lysosome
- 2. The most common primary malignant tumor of kidney in children is
  - 1. juxtaglomerular cell carcinoma
  - 2. small cell carcinoma
  - 3. wilms tumor
  - 4. primary renal cell carcinoma
- Which of the following is **not** true about Bence Jones proteins?
  - 1. It coagulates between 40-60° C and disappear on heating further
  - 2. It is composed of heavy chain of immunoglobulin proteins
  - 3. It is seen commonly in urine of patients with multiple myeloma
  - 4. It may be seen in patients with muchain heavy disease
- A patient reveals a fasting plasma glucose level of 120 mg/dl on routine blood testing. Futher line of treatment would be
  - no further investigation; patient has normal fasting glucose levels
  - 2. patient may be having frank diabetes; start with oral hypoglycemic
  - 3. patient has impaired fasting glucose level; further investigation with oral glucose tolerance test should be done
  - 4. patient may have frank diabetes; further investigation with oral glucose tolerance test should be done
- 5. Ventilation: perfusion ratio of 0 indicates
  - 1. airway obstruction
  - 2. pulmonary embolism
  - 3. pulmonary shunt
  - 4. congestive heart failure
- 6. Red infarcts are seen in
  - 1. kidney
- 2. heart
- 3. brain
- 4. liver
- All of the following are lab findings indicative of nephrotic syndrome except
  - 1. severe proteinuria
  - 2. hypoalbuminemia
  - 3. hypergammaglobulinemia
  - 4. hypercholesterolemia

- 8. Cells mimicking Reed Sternberg Cells are
  - 1. astrocytes
  - 2. anaplastic lymphoma cells
  - 3. satellite cells
  - 4. basket cells
- 9. PT is prolonged in deficiency of which of the following factors?
  - 1. XII

2. VII

3. K

4. |

- 10. AIDS related malignancy include all except
  - 1. Kaposi's sarcoma
  - 2. non Hodgkin's lymphoma
  - 3. cervical cancer
  - 4. Hodgkin's lymphoma
- 11. The type of chromosomal aberration **not** usually seen in Down's syndrome is
  - 1. trisomy

2. translocation

3. inversion

4. mosaic

- 12. A patient with known history of hemophilia A reports with an episode of excessive bleeding in joints. His lab findings will indicate
  - 1. increased PTT, unaffected PT
  - 2. increased PT, reduced PT
  - 3. increased PT, unaffected PTT
  - 4. reduced PTT, increase PT
- 13. In amyloidosis of tongue, the amyloid is deposited primarily in
  - 1. stromal connective tissue
  - 2. surface epithelium
  - 3. striated muscles
  - 4. cytoplasm of muscle cells
- Egg shell calcification of hilar lymph nodes is most commonly due to
  - 1. silicosis
  - 2. sarcoidosis
  - 3. asbestosis
  - 4. beryllosis
- 15. Rise in unconjugated bilirubin will cause
  - 1. dark urine
- 2. dark feces
- 3. pale urine
- 4. pale feces
- 16. Vancomycin exerts its antibacterial effects by
  - 1. inhibiting cell wall synthesis
  - 2. interfering with cellular respiration
  - 3. binding to ribosomal subunits and interfering with protein synthesis
  - 4. causes misreading of the mRNA code

## B

#### 1301/03

- Amphotericin B is used in treatment of all of the following except
  - 1. fungi
  - 2. rickettsiae
  - 3. protozoa
  - 4. staphylococcus
- 18. Nevirapine is a
  - 1. nucleoside reverse transcriptase inhibitor
  - 2. protease inhibitor
  - 3. non nucleoside reverse transcriptase inhibitor
  - 4. nucleotide analogue
- 19. Morphine is contraindicated in
  - 1. acute traumatic injuries
  - 2. myocardial infarction
  - 3. head injury
  - 4. anxiety
- 20. Propranolol is a
  - 1. non selective β antagonist
  - 2. selective β, antagonist
  - selective β<sub>2</sub> antagonist
  - 4. selective β agonist
- 21. Ondansetron is used in cancer patients due to its following action
  - 1. prokinetic
  - 2. antiemetic
  - 3. sedating agent
  - 4. anticancer drug
- 22. Ganglion blocking agents will cause all of the following except
  - 1. tachycardia
  - 2. blood vessel dilation
  - 3. constipation
  - 4. excessive sweating
- 23. The drug of choice in status epilepticus is
  - 1. phenytoin
- 2. diazepam
- 3. morphine
- 4. valproate
- 24. Tacrolimus is
  - 1. a specific T cell inhibitor
  - 2. an lytotoxic drug
  - 3. a specific B cell inhibitor
  - 4. an immune modulator
- 25. The drug of choice for emergency vasodilation as in hypertensive crisis is
  - 1. isosorbide dinitrate
  - 2. nitroglycerine
  - 3. sodium nitroprusside
  - 4. clonidine

- Cross resistance of isoniazid is seen with
  - 1. cycloserine
- 2. ethionamide
- 3. rifampin
- 4. ethambutol
- 27. Maximal response obtainable by a drug is a measure of its
  - 1. potency
  - 2. efficacy
  - 3. therapeutic index
  - 4. therapeutic range
- 28. The most toxic antifungal amongst the following is
  - 1. flucytosine
  - 2. greisofulvin
  - 3. clotrimazole
  - 4. amphotericin B
- 29. All the following are antipseudomonal drugs except
  - 1. piperacillin
  - 2. cefoperazone
  - 3. ciprofloxacin
  - 4. cefpodoxime proxetil
- 30. An example of fourth generation cephalosporin is
  - 1. cefadroxil
- 2. cefepime
- 3. cefuroxime
- 4. cefixime
- 31. Study of electrical activity of muscle is called
  - 1. EMG
- 2. EEG
- 3. ECG
- 4. venn diagram
- 32. The thermostat of human body is considered to be
  - 1. posterior hypothalamus
  - 2. pars intermedia
  - 3. pontine cerebellum
  - 4. anterior hypothalamus
- 33. Which of the following is **not** an effect of the parathyroid hormone
  - 1. increased osteoclastic activity
  - 2. increased renal tubular reabsorption of calcium
  - 3. increased renal absorption of phosphate and bicarbonate
  - 4. increased serum calcium
- 34. Iron is predominantly absorbed in
  - 1. duodenum
  - 2. jejunum
  - 3. ileum
  - 4. all have equal absorption
- 35. During fasting the pH of stomach **approximately** 
  - 1. 1-2
- 2. 5-7
- 3. 3-4
- 4. 8 9

- Improper tissue oxygenation despite adequate arterial oxygen supply indicates
  - 1. anoxic anoxia
  - 2. histotoxic anoxia
  - 3. stagnant anoxia
  - 4. anemic anoxia
- 37. Carotid bodies respond primarily to changes in
  - 1. dissolved arterial CO,
  - 2. dissolved venous CO,
  - 3. dissolved arterial O2
  - 4. hemoglobin saturation with oxygen
- 38. Which of the following is not a primary taste?
  - 1. Saltv
- 2. Sweet
- 3. Umami
- 4. Chilli
- 39. Which of the following is **not** a component of human bile?
  - 1. Water
  - 2. Trypsin
  - 3. Cholesterol
  - 4. Immunoglobulins
- 40. The storage form of iron is
  - 1. transferrin
- 2. ferritin
- 3. apoferritin
- 4. ceruloplasmin
- 41. Which of the following is the most antigenic?
  - 1. Protein
  - 2. Lipid
  - 3. Cholesterol
  - 4. Carbohydrate
- 42. Part of renal tubule impermeable to water is
  - 1. PCT
  - 2. descending limb of loop of Henle
  - 3. ascending limb of loop of Henle
  - 4. distal tubule
- 43. Loss of touch and proprioception is seen in the lesions of
  - 1. lateral spinothalamic tract
  - 2. dorsal column
  - 3. ventral column
  - 4. stellate ganglion
- 44. 2,3-DPG is decreased by
  - 1. exercise
- 2. thyroid hormone
- 3. acidosis
- 4. high altitude
- 45. Which of the following is an inhibitory transmitter in CNS?
  - 1. Glutamate
- 2. Aspartate
- 3. GABA
- 4. Alanine

- 46. The first community water fluoridation was carried out in
  - 1. 1945, Colorado
  - 2. 1945, Grands Rapids
  - 3. 1945, Oak Park
  - 4. 1945, Evanston
- 47. Community Fluorosis Index was given by
  - 1. Hershel Horowitz
  - 2. Albert Kingman
  - 3. Murray and Shaw
  - 4. Trendley Dean
- 48. A score of 1 in Dean's index indicates
  - slight aberration in enamel translucency (occasional white spots)
  - 2. white spots in less than 25% of the tooth surface
  - 3. white spots in 25-50% of the tooth surface
  - 4. occasional white spots with brown staining
- 49. All of the following are true about National AIDS Control Program (NACP) **except** 
  - 1. it was launched in 1982
  - professional blood donation was banned since 1st January 1998
  - 3. testing of blood for HIV and hepatitis became mandatory from 1st June 2001
  - 4. free anti retrovirus therapy provision in high prevalence states like Tamil Nadu and Maharashtra
- 50. Human anatomical waste is disposed in
  - 1. blue bags
  - 2. red bags
  - 3. black bags
  - yellow bags
- If grading of malocclusion is classified as mild, moderate and severe; scale of measurement used is
  - 1. interval
  - 2. nominal
  - 3. ordinal
  - 4. ratio
- 52. Pit and fissure sealants are examples of
  - 1. health promotion
  - 2. specific protection
  - 3. early diagnosis and treatment
  - 4. specific intervention
- 53. OHI-S was given by
  - 1. Greene & Vermilion, 1960
  - 2. Katz, 1960
  - 3. Moller and Poulsen, 1966
  - 4. Greene and Vermilion, 1964

#### B

#### 1301/03

- 54. Which of the following is **not** true about case control studies?
  - 1. It is suitable for investigation of rare diseases
  - 2. There is less problem of attrition
  - 3. It is good to evaluate diseases with long incubation period
  - 4. It is particularly useful to evaluate relative risk
- 55. All of the following are measures of central tendency except
  - 1. mean
- 2. median
- 3. variance
- 4. mode
- 56. Methionine is deficient in
  - 1. cereals
- 2. pulses
- 3. eggs
- 4. fish
- 57.  $Y = a+b_1x_1+b_2x_2+b_3x_3$ : This equation is an example of
  - 1. correlation
  - 2. simple linear regression
  - 3. multiple regression
  - 4. simple exponential regression
- 58. Yellow fever is transmitted by
  - 1. mosquitoes
- 2. hard ticks
- 3. soft tick
- 4. sandfly
- 59. The abrasive used in toothpaste is
  - 1. sodium lauryl sulfate
  - 2. calcium pyrophosphate
  - 3. sodium metaphosphate
  - 4. methyl cellulose
- 60. Negative predictive value means
  - 1. likelihood that the person with a negative test result does not have the disease
  - 2. likelihood that the person with a negative test result has the disease
  - 3. likelihood that the person with a positive test result does not have the disease
  - 4. likelihood that the person with a positive test result has the disease
- 61. The most common site for AOT is
  - 1. anterior maxilla
  - 2. posterior maxilla
  - 3. anterior mandible
  - 4. posterior mandible
- 62. Dens in dente most commonly is found in which of the following tooth?
  - 1. Maxillary 1st molar
  - 2. Mandibular 1st molar
  - 3. Maxillary lateral incisor
  - 4. Mandibular 2<sup>nd</sup> premolar

- 63. Osler Weber Rendu syndrome is also called
  - 1. encephalotrigeminal angiomatosis
  - 2. hereditary intestinal polyposis
  - 3. hereditary hemorrhagic telangiectasia
  - 4. familial polyposis coli
- 64. The vitamin with least role in tooth formation is
  - 1. vitamin A
- 2. vitamin C
- 3. vitamin D
- 4. vitamin B
- 65. Which of the following causes internal staining of teeth?
  - 1. Fluorosis
  - 2. Chromogenic bacteria
  - 3. Tobacco
  - 4. Iron supplements
- 66. Neurofibromatosis is transmitted as
  - 1. autosomal recessive
  - 2. X-linked recessive
  - 3. autosomal dominant
  - 4. X-linked dominant
- 67. Salivary gland tumor which characteristically spreads along perineural spaces is
  - 1. mucoepidermoid carcinoma
  - 2. acinic cell carcinoma
  - 3. adenoid cystic carcinoma
  - 4. clear cell tumour
- 68. Hypercementosis of teeth alongwith loss of lamina dura may be seen patients suffering from
  - 1. osteosarcoma
  - 2. Paget's disease
  - 3. chronic sclerosing osteomyelitis
  - 4. fibrous dysplasia
- 69. Extranodal involvement is common in
  - 1. B cell lymphoma
  - 2. Hodgkin's disease
  - 3. Mantle cell lymphoma
  - 4. non Hodgkin's disease
- 70. The most common location of extravasation type of mucocele is
  - 1. upper lip
  - 2. lower lip
  - 3. soft palate
  - 4. buccal mucosa
- 71. Positive Paul Bunnel test is seen in
  - 1. infectious mononucleosis
    - 2. oral tuberculosis
    - 3. actinomycosis
    - 4. syphilis

- 72. A patient is suffering from acute stomatitis. On examination multiple small ulcers with an erythematous base are seen on buccal mucosa and vestibule. The patient has generalized malaise and regional lymphadenopathy. Patient may be suffering from
  - 1. herpes simplex infection
  - 2. herpes zoster infection
  - 3. apthous stomatitis
  - 4. infectious mononucleosis
- 73. The most common tumour of mandible is
  - 1. squamous cell carcinoma
  - 2. ameloblastoma
  - 3. osteosarcoma
  - 4. basal cell carcinoma
- 74. Leukoplakia with higher malignant potential is seen in
  - 1. dorsum of tongue
  - 2. floor of mouth
  - 3. buccal mucosa
  - 4. hard palate
- 75. The most aggressive type of ameloblastoma is
  - 1. follicular
  - 2. acanthomatous
  - 3. plexiform
  - 4. granulomatous
- 76. Tactile threshold of loading of natural teeth is
  - 1. 0.001 0.1 N
  - 2. 0.01 0.1 N
  - 3. 0.1 1N
  - 4. 0.0001 0.001 N
- 77. Epithelium of vermilion border of lips is
  - 1. non keratinized stratified squamous
  - 2. orthokeratinized stratified squamous
  - 3. parakeratinized stratified squamous
  - 4. orthokeratinized stratified cubiodal
- 78. Which of the following statements is false?
  - Mantle dentin is the first formed dentin underlying the DEJ
  - 2. Intertubular dentin comprises the main body of dentin
  - 3. Interglobular dentin is more mineralized
  - 4. Peritubular dentin is more highly mineralized
- 79. Maximum number of rods are found in
  - 1. upper 1st molar
  - 2. lower 1st molar
  - 3. upper 2<sup>nd</sup> molar
  - 4. lower 2<sup>nd</sup> molar

- 80. Acidic non amelogenin enamel protein which has a role in hydroxyapetite formation is
  - 1. enamelin
- 2. tuftlin
- 3. sheathlin
- 4. phosphoproteins
- 81. Normal rate of human enamel formation is
  - 1. 1 μ/day
- 2. 2 µ/day
- 3. 4 µ/day
- 4. 8 μ/day
- 82. First evidence of calcification of deciduous incisors is
  - 1. 1-2 months in utero
  - 2. 3-4 months in utero
  - 3. 5-6 months in utero
  - 4. at birth
- 83. Which of the following is hypocalcified?
  - 1. Perikymata
  - 2. Rod ends
  - 3. Enamel tuft
  - 4. Surface structureless layer
- 84. The part of oral cavity most sensitive to heat is
  - 1. lips
- 2. gingiva
- 3. palate
- 4. ventral tongue
- 85. Curve of Monson was given in
  - 1. 1899
- 2. 1930
- 3. 1945
- 4. 1920
- 86. In case of acute pulpitis, patient is usually not able to exactly pinpoint the offending tooth. This is because
  - 1. C fibres from pulp have a higher threshold of activation
  - 2. Aδ fibres innervate multiple teeth
  - 3. Aδ afferents from pulp relay over a large area in cerebral cortex
  - 4. more extensive convergence of C fibres to the 2nd order neurons in brain
- 87. Enamel calcification is usually not complete at the time of eruption of tooth. It usually completes after eruption by
  - 1. 1 year
- 2. 2 years
- 3. 3 years
- 4. 4 years
- 88. Which of the following is **false** about deciduous teeth?
  - 1. They are called milk teeth as their refractive index is close to that of milk
  - 2. They are wider mesiodistally compared to cervicocclusally
  - The cervical enamel rod slope occlusally from DEJ
  - 4. Mammelons are commonly seen in central incisors

- 89. All of the following are age related changes in oral mucosa **except** 
  - 1. reduced number of mast cells
  - 2. reduced keratinization
  - 3. decreased cellularity
  - 4. decreased oxygen consumption
- 90. Odontoblasts are differentiated from mesenchymal cells in how much time after pulpal injury?
  - 1. 5 days
- 2. 15 days
- 3. 30 days
- 4. 45 days
- 91. Which one of the following is the junction of sagittal and coronal sutures?
  - 1. Lambda
  - 2. Pterion
  - 3. Bregma
  - 4. Inion
- 92. All the following are muscles of soft palate except
  - 1. palatoglossus
  - 2. palatopharyngeus
  - 3. musculus uvulae
  - 4. styloglossus
- 93. Which of the following is a feature of X chromosome?
  - 1. Metacentric
  - 2. Submetacentric
  - 3. Telocentric
  - 4. Acrocentric
- 94. Which of these is a cartilaginous joint?
  - 1. Knee joint
  - 2. Spheno-occipital joint
  - 3. Sternoclavicular joint
  - 4. Wrist joint
- 95. Which of the following is **not** a content of submandibular space?
  - 1. Facial artery
  - 2. Submandibular lymph nodes
  - 3. Hypoglossal nerve
  - 4. Mylohyoid nerve and vessels
- 96. Foramen ovale is located within
  - 1. greater wing of sphenoid
  - 2. lesser wing of sphenoid
  - 3. petrous temporal
  - 4. junction of greater and lesser wing of sphenoid
- 97. Tongue muscle not supplied by hypoglossal nerve is
  - 1. palatoglossus
  - 2. longitudinal muscles
  - 3. styloglossus
  - 4. genioglossus

- 98. Strongest part of bone is
  - 1. diaphysis
  - 2. metaphysis
  - 3. epiphysis
  - 4. all parts are equally strong
- 99. Which of the following is **not** an accessory muscle of mastication?
  - 1. Digastric
  - 2. Buccinator
  - 3. Platysma
  - 4. Pterygoid
- 100. Upper half of face is spared in which type of facial nerve paralysis?
  - 1. Unilateral lower motor neuron lesion
  - 2. Bilateral lower motor neuron lesion
  - 3. Unilateral upper motor neuron lesion
  - 4. Bilateral damage to motor neuron nucleus
- 101. Carnegie stages are used to define stages of
  - 1. infancy
  - 2. tooth development
  - 3. embryonic development
  - 4. fetal development
- 102. The deepest layer of deep cervical fascia is
  - 1. carotid sheath
  - 2. investing layer
  - 3. pretracheal layer
  - 4. prevertebral layer
- 103. Midline patterning of face is influenced by the expression of
  - 1. Bmp-4
- 2. Tgf
- 3. Shh
- 4. Lim-1
- . 104. An example of apocrine gland is
  - 1. mammary gland
  - 2. sweat glands
  - 3. sebaceous glands
  - 4. lacrimal glands
- 105. Foramen which transmits maxillary nerve is
  - 1. ovale
- 2. rotundum
- 3. lacerum
- 4. spinosum
- 106. Chylomicrons are principally composed of
  - 1. TAG
- 2. protein
- 3. esters
- 4. phospholipids
- 107. Which type of RNA has the highest percentage of modified base?
  - 1. mRNA
- 2. snRNA
- 3. tRNA
- 4. rRNA

mitochondria is

1. b-c-a-a<sub>3</sub>

3. c-a-a<sub>3</sub>-b

108. Iron is present in all of the following except 119. All the following are examples of non synthetic 1. myoglobin (phase 1) reactions except 2. cytochrome 1. reduction 2. hydrolysis 3. catalase 3. acetylation 4. oxidation 4. pyruvate kinase 120. The irreversible step of glycolysis is mediated by 109. All the following are true about chaperones except 1. phosphoglycerate kinase 1. they are protein molecules 2. pyruvate kinase 3. malate dehydrogenase 2. help in folding of other proteins 3. act as catalyst during formation of secondary 4. lactate dehydrogenase linkages in proteins 121. Which phase of mercury is most susceptible to 4. also called heat shock proteins corrosion? 110. All the following are types of embryonic hemoglobin Ag, Hg, 2. Ag<sub>3</sub>Cu<sub>2</sub> 3. Cu<sub>6</sub>Sn<sub>5</sub> except 4. Sn<sub>7-8</sub>Hg 1. gower 1 2. HbF 122. Delayed expansion of amalgam starts after 4. portland 3. gower-2 2. 20 minutes 1. 24 hours 3. 3-5 days 4. 7 days 111. The respiratory quotient of fats is 1. 1 2. 0.7 123. Annealing is 3. 1.5 4. 0.4 1. hardening heat treatment 2. stress relieving heat treatment 112. The amino acid with imino group is 3. alloying 1. glycine 2. tyrosine 4. process of converting soft alloy into cold worked 3. proline 4. valine alloy 113. The portion of DNA replicated into mRNA during 124. C-factor is maximum in which of the following tooth transcription is cavity design? 1. intron 2. exon 1. Class I 2. Class II 3. poson 4. chaperones 3. Class III 4. Class IV 114. Ribose is an example of 125. Increased flow rate on application of shearing stress 1. triose 2. tetrose is called 3. pentose 4. hexose 1. elasticity 2. pseudoplasticity 115. Which of the following is a mitochondrial enzyme? 3. plasticity 4. pseudoelasticity 1. Cytochrome oxidase 126. The major advantage of microfilled resin composites 2. Pyruvate kinase is considered to be 3. Pyruvate dehydrogenase 1. high strength 4. Lactate dehydrogenase increased surface hardness 116. Modification and sorting of glycoproteins occurs in 3. less setting shrinkage 1. golgi bodies 4. better aesthetics 2. endoplasmic reticulum 127. The most cytoxic impression material amongst the 3. mitochondria following is 4. nucleus 1. addition silicone 117. α-ketoglutarate dehydrogenase has all of the 2. condensation silicone following cofactors except 3. polysulphide 1. thiamine 2. FAD 4. polyether 3. niacin 4. glutarate 128. An example of synthetic wax is 118. The normal sequence in electron transport chain in 1. carnuba wax

2. c-a-b-a<sub>3</sub>

4. a-a<sub>2</sub>-b-c

cocoa butter
 castor wax

4. Japan wax

## D

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- 129. The accelerator of gypsum product is
  - 1. NaCl upto 2%
- 2. borates
- 3. citrates
- 4. acetates
- 130. Rank the following in decreasing order of dimensional stability
  - i. addition silicone
  - ii. condesation silicone
  - iii. polysulphide
  - iv. polyether

The correct order is

- 1. i > iv > iii > ii
- 2. i > ii > iii > iv
- 3. i > iii > ii > iv
- 4. ii > i > iii > iv
- 131. Which of the following statements is false?
  - 1. Elastic modulus of enamel is more than dentin
  - 2. Dentin has more tensile strength than enamel
  - 3. Elastic modulus of dentin is more than enamel
  - 4. Proportional limit of enamel is more than dentin
- 132. Calcium hydroxide acts primarily by
  - 1. stimulating formation of reparative dentin
  - 2. creating area of sterile necrosis
  - 3. chelation of microbes
  - 4. stimulating the differentiation of undifferentiated mesenchymal cells into fibroblasts
- 133. According to ADA specification the compressive strength at 1 hour for type IV dental stone should be
  - 1. 1300 psi
- 2. 3000 psi
- 3. 5000 psi
- 4. 7000 psi
- 134. Luting and lining GIC is classified as
  - 1. type I
- 2. type II
- 3. type III
- 4. type IV
- 135. Alloy of Ti4Al6V is used as implant material instead of cpTi because of
  - 1. better biocompatibility
  - 2. better osteointegration
  - 3. higher strength
  - 4. presence of a thicker oxide layer on the implant surfaces
- 136. Prebiotics is a term for
  - microbial organisms added to food for the benefit of the host
  - 2. non digestible food components added to food for the benefit of the host
  - 3. digestible food ingredients which increase host enzymatic activity
  - 4. drugs given along with food supplements

- 137. All the following are true about leptospirosis except
  - 1. penicillin is the drug of choice for the disease
  - 2. urine and feces are the main modes of transmission
  - 3. IgM is detectable in the 2nd week following infection
  - 4. usual latent period is around 10 days
- 138. The technique in which phage DNA is incorporated into bacterial DNA so that it moves along cell lines during replication is called
  - 1. transduction
  - 2. transformation
  - 3. transport phenomenon
  - 4. lysogenic conversion
- 139. All are methods of viral culture except
  - 1. tissue culture
  - 2. embryonated eggs
  - 3. animal inoculation
  - 4. loeffler serum
- 140. Leishmaniasis is transmitted by
  - 1. tse tse fly
- 2. ticks
- 3. sandfly
- 4. lice
- 141. Lyme's disease is caused by
  - 1. treponema
- 2. borrelia
- 3. leptospira
- 4. hemophilus
- 142. An example of type IV hypersensitivity is
  - 1. anaphylactic shock
  - 2. contact dermatitis
  - 3. SLE (systemic lupus erythematosus)
  - 4. Arthus reaction
- 143. All the following are true about yersinia pestis except
  - 1. it causes plaque
  - 2. lipopolysaccharide is a major endotoxin
  - 3. optimal growth occurs at 28° C
  - 4. it is a gram positive coccobacillus
- 144. Hospital spills of infected fluids are cleaned by
  - 1. glutaraldehyde
  - 2. cetrimide
  - 3. sodium hypochlorite
  - 4. phenois
- 145. A 21 year old female reported to hospital with severe diarrhea and vomiting. Her history revealed consumption of stale rice around 10 hours back. She may be suffering from infection by
  - 1. clostridium perfringens
  - 2. bacillus cereus
  - 3. E. coli
  - 4. salmonella

- 146. Which of the following is **not** a virulence factor of bacteria?
  - 1. Fimbria
  - 2. Capsule
  - 3. Endotoxin
  - 4. DNA
- 147. Which of the following is an intracellular pathogen?
  - 1. Chlamydia
  - 2. H. influenzae
  - 3. Actinomyces
  - 4. Toxoplasma

- 148. A patient is suffering from viral hepatitis. His blood sample reveals a high count of HBsAg, HBeAg and HBcA2. The patient may be in which stage of disease?
  - 1. Acute stage
- 2. Early stage
- 3. Carrier stage
- 4. Convalescent stage
- 149. Which is the test of choice in the first week of typhoid fever?
  - 1. Stool culture
- 2. Widal test
- 3. Blood culture
- 4. Urine culture
- 150. Principle antibody in the early stage of infection is
  - 1. lgG
- 2. IgM
- 3. IgA
- 4. lgD