

## AIIMS November 2010 MDS/Dental Entrance Question paper with answers

The Questions from AIIMS Nov 2010 MDS/Dental Entrance, All the Best for your entrance exams. Follow the question papers and do well in Entrances. As we have seen that previous questions are repeated a lot of times it is sensible to be up to date with the questions and practice them more than once.

**1. A 8 year old child has increased horizontal anterior bone loss with premature loss of deciduous teeth. There is defective cementum and shows excretion of phosphoethanolamine in the urine. The child is suffering from ?**

1. Hypophosphatasia
2. Vit. D resistant rickets
3. Juvenile Periodontitis
4. Osteomalacia

**Ans: 1**

2. A 9 year old female patient with severe oral ulceration is suffering with salivation, fever, headache and malaise. The peeling of skin of hand and sole is noted. There is increased tendency for sweating. She is also giving one month history of using a new teething gel available in the market, the most probable prognosis is ? (Repeat from Aiims 2008)

1. Erosive lichen Planus

2. Epidermolysis Bullosa
3. Acrodynia
4. Steven Johnsons syndrome

**Ans: 3**

3. A Radicular Cyst is associated with ?

1. Vital tooth
2. Non-Vital tooth
3. Both
4. None

**Ans: 2**

4. Ehler Danlos Syndrome is ? (Repeat from AIPG 2009)

1. Autosomal Dominant
2. Autosomal Recessive
3. X-linked dominant
4. X-linked recessive

**Ans: 1**

5. Increased Monocytic count is seen in Typhus and which of the following conditions ? (Repeat from AIIMS May 2007)

1. SABE
2. Herpes LABialis
3. HIV
4. Characteristic Parasitic Infections

**Ans: 1**

6. Moth Eaten Appearance is seen in all except ?

1. Osteomyelitis

2. Haemorrhagic Cyst
3. OKC
4. Osteosarcoma

**Ans: 2**

7. Radiographs of a 40 year old female revealed radiolucent areas around several of her mandibular teeth, all teeth which tested vital on the electric pulp tester. These areas represent ?

1. Multiple granulomas
2. Periapical osteofibrosis
3. Chronic Periapical abscess
4. Bone hypoplasias associated with opalescent teeth

**Ans: 2**

8. Which of the following presents as radiopaque area found at the root apex of young permanent teeth involved in chronic pulpitis ?

1. Apical Cyst
2. Apical Condensing Osteitis
3. Chronic Apical Periodontitis
4. Stage one Apical Osteofibrosis

**Ans: 2**

9. A patient shows a radiolucent area surrounding the apices of mandibular anterior teeth which are vital. The most probable diagnosis is ? (Repeat from Aiims Nov 2008)

1. Periapical granuloma
2. Cementoblastoma
3. Radicular cyst
4. Chronic Abscess

**Ans: 2**

10. Which radiographic technique is best for detecting proximal carious lesion with minimum X-ray exposure ?

1. Bitewing with Bisecting angle technique
2. Bitewing with Paralleling technique
3. Bitewing with RVG
4. Panoramic radiography

**Ans: 3**

11. Bisecting angle technique is based on ?

1. ALARA principle
2. SLOB technique
3. Rule of Isometry
4. Convergence

**Ans: 3**

12. A male patient aged 45 years complains of a firm, painless swelling in the anterior palate and bilaterally symmetrical heart shaped radiolucency in between the central incisors. The teeth are vital. Most probable diagnosis is ?

1. Nasoalveolar cyst
2. Median Palatal cyst
3. Globulomaxillary cyst
4. Nasopalatine canal cyst

**Ans: 4**

13. A vertical radiolucent line extending between maxillary central and lateral incisor represents ?

1. An Artifact

2. Fracture line
3. Nutrient Canal
4. Sinus and Fistula

**Ans: 1**

14. Green stains found on recently erupted upper anterior teeth of child which are not removed after brushing are due to ?

1. Chromogenic bacteria
2. Neonatal Line
3. Calculus
4. Materia Alba

**Ans: 1**

15. To predict the occurrence of caries in a 6 year old child which of the following gives the best result ?

1. Sibling caries
2. Mothers caries
3. Synders Test
4. Parental Caries

**Ans: 2**

16. The reason why primary molars appear lighter in color is ?

1. Due to less thickness of dentin underlying enamel
2. Different color
3. Because of contrast with the adjacent tissue
4. Different refractive index

**Ans: 4**

17. Which of the following is true about the initiation of

calcification of teeth ?

1. Initiation of calcification of primary teeth is complete at the time of birth
2. Initiation of calcification of all primary teeth and permanent incisors complete at birth
3. Initiation of calcification of all primary and permanent teeth completes at birth except 3rd molars
4. Calcification of primary teeth starts after birth

**Ans: 1**

18. Root resorption of maxillary deciduous central incisors starts by ?

1. 3 years
2. 4 years
3. 5 years
4. 6 years

**Ans: 2**

19. Histologically the dental pulp most closely resembles what type of tissue ?

1. Nerve tissue
2. Vascular tissue
3. Granulation tissue
4. Loose Connective tissue

**Ans: 4**

20. Why the acid etchant is supplied in gel form ?

1. To have better control over flow
2. To get higher concentration of etchant
3. To act more rapidly on enamel surface

4. To get good taste in patient mouth

**Ans: 1**

21. Dentin "Conditioner". True is ?

1. Remove Smear Layer
2. Increases free surface energy of dentin
3. Has low viscosity and bonds to tooth surface tubules
4. Forms a layer of resin on dentin

**Ans: 1**

22. What is the approximate stress caused by polymerisation contraction of composite ?

1. 1 MPa
2. 5 MPa
3. 15 MPa
4. 30 MPa

**Ans: 2**

23. A Dentin Primer

1. Etches the Dentin
2. Raises the surface free energy of the dentin
3. Removes the smear layer
4. Bonds the composite

**Ans: 2**

24. How deep is the micro-porus layer created by etching the enamel (in Micrometers)

1. 0-5
2. 5-50
3. 50-500

4. 500-5000

**Ans: 2**

25. If a patient has gingival recession, how far should the gutta percha be trimmed back before sealing the coronal portion ?

1. 1mm below the level of recession
2. 1mm below the ACJ
3. 1mm below the canal opening
4. 1mm below the roof of the pulp chamber

**Ans: 1**

26. If you choose to temporarily seal the access cavity of a tooth with kalzinol, how thick should it be ?

1. 1 mm
2. 2 mm
3. 3 mm
4. 4 mm

**Ans: 3 (Kalzinol is Zinc Oxide temporary cement)**

27. On preparing the root canal with a protaper F2 file, 1mm of the GP cone is cut so as to fit the canal with friction. The diameter of the apical region is ?

1. 0.29mm
2. 0.30mm
3. 0.31mm
4. 0.32mm

**Ans: 3**

28. Magnification allowed in working length determination by paralleling technique is ?



1. None
2. 1mm
3. 2mm
4. 3mm

**Ans: 3**

29. A Traumatized tooth with necrotic pulp shows periapical area of rarefaction radiographically. The pulpal area is closed. Viable microorganisms might be cultured from the canal in approximately what percentage of cases ?

1. 10%
2. 30%
3. 40%
4. 80%

**Ans: 4 (Enterococci are found mostly)**

30. Which of the following is not a Kochs Postulate ?

1. The bacteria should be able to be isolated from diseased tissue
2. When inoculated in experimental animals, bacteria may or may not cause disease
3. Pure cultures can be obtained
4. Bacteria should be able to be isolated from the diseased tissue in the experimental animals

**Ans: 2**

31. To identify the key microorganisms in periodontal disease, kochs postulates have been modified by ?

1. Socransky
2. Glickman
3. Russel

4. Vermillion

**Ans: 1**

32. According to Glickman, maximum accumulation of plaque takes place in approximately ?

1. 7 days
2. 15 days
3. 30 days
4. 60 days

**Ans: 3**

33. The Bacterial density or concentration in saliva on an average is ?

1. 500 million / ml
2. 87 million / ml
3. 45 million / ml
4. 750 million / ml

**Ans: 4**

34. After cleaning and Pumicing the tooth surface plaque formation begins to form after ?

1. Few minutes
2. 1 hour
3. 2 to 4 hours
4. 1 day

**Ans: 1**

35. The depth of clinical gingival sulcus is the distance between the gingival margin to the ?

1. Cementoenamel junction
2. Alveolar crest

3. Apical extension of junctional epithelium
4. Apical penetration of the probe

**Ans: 4**

36. Which of the following conditions requires gingivoplasties as it creates gingival defects ?

1. ANUG
2. Desquamative gingivitis
3. Erosive Lichen Planus
4. Acute Herpetic gingivostomatitis

**Ans: 1**

37. A periodontal pocket of 8 mm deep having the junctional epithelium coronal to CE junction is ?

1. An Infrabony pocket
2. A Pseudopocket
3. A true periodontal pocket
4. A Furcation involvement

**Ans: 2**

38. Severe Alveolar Bone loss is seen in patients with Juvenile Periodontitis is related to ?

1. Impaired Osteoblastic activity
2. Increased Phagocytosis
3. Increased Macrophage migration
4. Impaired Neutrophil chemotaxis

**Ans: 4**

39. Which of the following organism is not implicated in etiology of Periodontal disease ?

1. Bacteroides

2. Wollinella
3. Neisseria
4. Eikenella

**Ans: 3**

40. One common Radiographic finding in clinical gingivitis ?

1. Vertical Bone loss
2. Normal Bone pattern
3. Horizontal Bone loss
4. Increase in Bone density

**Ans: 2**

41. A 9-year-old child having carious maxillary lateral incisor got small swelling over the respective area. In 48 hours the swelling enlarged and reached the lower border of eye, very sensitive to touch and hot, painful to the touch stimuli. The lymph node is palpable and he has little fever, the swelling rebounds on pressure. The recommended treatment is ?

1. Antibiotic and hot fomentation
2. Incision and Drainage
3. Injection of sclerosing unit
4. Application of pressure bandage

**Ans: 2**

42. A patient on steroid therapy has to undergo elective extraction of many teeth. The premedication indicated prior to surgical procedure is ?

1. NSAIDS
2. Antibiotics
3. Antihistamines

4. Antihypertensives

**Ans: 2**

43. In Bilateral Parasymphyseal fractures of the mandible the fractured segment is displaced posteriorly under the influence of ?

1. Anterior belly of digastric, mylohyoid and geniohyoid
2. Masseter, medial pterygoid and Lateral pterygoid
3. Buccinator, anterior and posterior belly of Digastric
4. Genioglossus, geniohyoid and Posterior belly of Digastric

**Ans: 4**

44. Most common cause of pulmonary embolism ?

1. Thrombophlebitis
2. End Arteritis
3. Atherosclerosis
4. Lymphangitis

**Ans: 1**

45. A middle aged female patient has eyes widely placed, sparse hair, increased systolic BP, increased pulse pressure, weight loss and nervousness. She may be suffering from ?

1. Hyperthyroidism
2. Hypothyroidism
3. Hyperparathyroidism
4. Hypopituitarism

**Ans: 1**

46. While giving Epidural nerve block by median approach which of the following ligaments are not encountered in the midline ?

1. Supraspinous ligament
2. Interspinous ligament
3. Posterior longitudinal
4. Ligamentum flavum

**Ans: 3**

47. All of the following are true about standard error of mean except ?

1. It is mean of samples based on normal distribution
2. It is calculated from standard deviation of mean
3. Used to estimate confidence limit
4. Standard error increases with size of sample

**Ans: 4**

48. Which of the following is an impact indicator for evaluation of ASHAS performance ?

1. Number of ASHAS trained
2. Number of ASHAS attending review meeting every year
3. Infant mortality rate
4. Percentage of deliveries with skilled assistance

**Ans: 2**

49. Which of the following is true about 'Z' score ?

1. Normal Distribution
2. Binominal distribution
3. Chi-square test
4. Non-parametric method

**Ans: 1**

50. Midline cerebellar lesions manifests as all of the

following except ?

1. Incoordinate posture and gait
2. Decomposition of movements
3. Titubation of head and neck
4. Nystagmus

**Ans: 2**

51. Hyponatraemia with increased total body sodium is seen in ?

1. Nephrotic Syndrome
2. Vomiting
3. Diuresis therapy
4. Renal tubular acidosis

**Ans: 1**

52. A patient presents with following parameters pH 7.6. The pCO<sub>2</sub> is 30 mm Hg, pO<sub>2</sub> is 102 mm Hg and HCO<sub>3</sub> is 20 mEq/L. Which of the following correctly describes the compensatory mechanism ?

1. Respiratory Alkalosis
2. Metabolic Alkalosis
3. Respiratory Acidosis
4. Metabolic Acidosis

**Ans: 4**

53. Genuiculatc Neuralgia is the uncommon neuralgia associated with ?

1. Trigeminal Nerve
2. Facial Nerve
3. Optic Nerve

4. Vagus Nerve

**Ans: 2**

54. Which nerve pierces between the lateral pterygoids to supply TMJ capsule ?

1. Auriculotemporal nerve
2. Facial Nerve
3. Massetric Nerve
4. Auricular Nerve

**Ans: 1**

55. Largest Organ in the body is ?

1. Heart
2. Kidney
3. Lung
4. Liver

**Ans: 4**

56. Transection at Mid pons level results in ?

1. Apnoea
2. Hyperventillation
3. Rapid and shallow breathing
4. Apneusis

**Ans: 4**

57. All of the following use cAMP as second messenger except ?

1. Corticotropin
2. Dopamine
3. Glucagon



4. Vasopressin

**Ans: 4**

58. Stability of Alveoli is maintained by ?

1. Compliance of Lung
2. Residual air in alveoli
3. Negative intrapleural pressure
4. Reduced surface tension by surfactant

**Ans: 4 (another factor is alveolar interdependence which keeps the alveoli open)**

59. Transport of carbon monoxide is diffusion limited because ?

1. Binds very avidly with hemoglobin
2. Diffusion coefficient of CO is less in water
3. CO is less absorbed in water
4. Alveolar membrane is less permeable

**Ans: 1**

60. Tubuloglomerular feedback occurs due to ?

1. ADH secretion in collecting Duct
2. Maintain a constant solute load on distal tubule
3. Aldosterone secretion
4. Balance between ascending and descending loop of henle

**Ans: 2**

61. The fastest conducting and largest diameter fibers are ?

1. A-alpha fibers
2. A-beta fibers

3. B fibers
4. C fibers

**Ans: 1**

62. Glucose transporter in Monocyte stimulated by Insulin is ?

1. GLUT1
2. GLUT2
3. GLUT3
4. GLUT4

**Ans: 4**

63. Which of these liver enzymes is basically a mitochondrial enzyme ?

1. SGPT
2. SGOT
3. GGT
4. Alkaline phosphatase

**Ans: 2**

64. Dyslipidemia can be diagnosed by ?

1. Total cholesterol level
2. Triglycerides/cholesterol ratio
3. LDL/HDL ratio
4. APoA1

**Ans: 3**

65. Infective form for mosquito in Plasmodium Falciparum is ?

1. Merozoites

2. Sporozoites
3. Gametocytes
4. Trophozoites

**Ans: 3**

66. Which of the following is not used as a disinfectant ?

1. 1-2% cetrimide
2. 100% alcohol
3. 2% Lysol
4. 5% chloroxylene

**Ans: 2**

67. About pseudomonas all are true except ?

1. Strict Aerobes
2. Can grow in disinfectants in hospitals
3. Infection is mainly due to endogenous source
4. Most common organism in burns patient

**Ans: 3**

68. About Bacteroides all are true except ?

1. Susceptible to many antibiotics
2. Present mainly in mixed infections
3. Most common species in B. Fragilis
4. Bile resistant Anerobes

**Ans: 1**

69. All of the following are true about Staphylococcus lugdunensis except ?

1. It is a normal skin commensal

2. It causes native valve endocarditis
3. It is susceptible to multiple types of antimicrobials
4. Some strains do not secrete coagulase

**Ans: 4**

70. Sickle cell anemia is caused due to ?

1. Nonsense mutation of beta chain
2. Missense mutation of beta chain
3. Deletion of beta chain
4. None of the above

**Ans: 2**

71. Malignant epithelial cells have increased number wider distribution of which of the following receptors ?

1. IL-1
2. Laminin
3. Histamine
4. Complement

**Ans: 2**

72. Cytokines and Interleukins are secreted by ?

1. Plasma cells
2. Macrophages
3. Lymphocytes
4. Platelets

**Ans: 2**

73. Which of the following is not an "obligate carrier" if following situations are given ?

1. Father of a son having X-linked recessive disease

**Ans: 1**

74. Why Pencillin and Erythromycin are not administered to a patient at the same time ?

1. Pencillin is inactivated by erythromycin
2. Erythromycin exerts its effects extracellularly
3. Erythromycin enhances the lactamase activity
4. All of the above

**Ans: 1**

75. AntiPseudomonal cephalosporin is ?

1. Cefoperozone
2. Cefuroxime
3. Cefadroxil
4. Cefoxitin

**Ans: 1**

76. Overdose of heparin is treated by ?

1. Potassium sulfate
2. Copper sulfate
3. Cellulose sulfate
4. Dextran sulfate

**Ans: 1**

77. True about penicillin G ?

1. Mainly excreted by kidney
2. Acid resistant
3. Broad Spectrum Antibiotic
4. Resistance to Pencillinase

**Ans: 1**

78. Reverse Steal phenomenon is shown by ?

1. Thiopentone
2. Enflurane
3. Isoflurane
4. All of the above

**Ans: 1**

79. Which of the following is associated with thiazide therapy ?

1. Impotency
2. Gynecomastia
3. Hyperkalemia
4. Ototoxicity

**Ans: 1**

80. Loading dose depends on ?

1. Volume distribution
2. Clearance
3. Rate of Distribution
4. Half Life

**Ans: 1**