Printed Pages: 10 Sr. No.20004

#### WST-DCI-2019-MDS-ORTHO-P-1-SET-1-D

| Total Questions: 100      | Max. Marks: 100             | Time: Two Hours            |
|---------------------------|-----------------------------|----------------------------|
| Roll No. (in figures)     |                             |                            |
| (in words)                |                             |                            |
|                           |                             | (Signature of Candidate)   |
| I have checked the entrie | s made above and in the OMR | •                          |
|                           |                             | (Signature of invigilator) |
|                           |                             |                            |

# CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All the candidates must return the test booklet as well as answer-sheet to the Invigilator concerned before leaving the Examination Hall. If any candidate leaves the examination hall without handing over the test booklet/ answer sheet to the Invigilator, a case of use of unfair means/ misbehavior will be registered against him/ her in addition to lodging an FIR with the Police. The answer-sheet of such a candidate will not be evaluated.
- 2. The candidates must not do any rough work or writing work in the answer-sheet (OMR Sheet). All rough work is to be done in the test booklet.
- 3. Candidates will be required to darken the circle by using **blue/ black ball point pen** only.
- 4. Books, papers, slide rule, log table, cellular phone, pager, calculator or any other electronic gadget etc. are not allowed in the Examination Hall.
- 5. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED THE CORRECT AND COMPLETE TEST BOOKLET CONTAINING SR.NO.1 TO 100 QUESTIONS, COMPLAINTS REGARDING MISPRINT ETC. WILL NOT BE ENTERTAINED 15 MINUTES AFTER THE EXAMINATION IS STARTED.

| 1.  | Which of the following gases used for soldering purposes has the highest flame temperature:                       |  |
|-----|---|--|
|     | (A) Hydrogen<br>(C) Propane   | (B) Natural gas<br>(D) Acetylene   |
| 2.  | Twinning effect is seen with: (A) Stainless steel (B) CoCr  | (B) NiTi<br>(D) All of the above   |
| 3.  | The following is the component that acts (A) Calcium sulphate (C) Potassium alginate                              | as a retarder in Alginate:<br>(B) Sodium phosphate<br>(D) Diatomaceous earth       |
| 4.  | Dentin bonding agent (DBA) has both hy<br>Hydrophillic end binds with:<br>(A) Composite<br>(C) Collagen of dentin | /drophillic and hydrophobic ends. The  (B) Hydroxyapatite  (D) Calcium of tooth    |
| 5.  | Benzoyl peroxide in resins acts as:<br>(A) Initiator<br>(C) Activator   | (B) Inhibitor (D) Plasticizer  |
| 6.  | The following chemicals can be used to EXCEPT: (A) Terra alba (C) Syngenite                                       | accelerate the setting of gypsum products,  (B) Rochelle salt  (D) Kieselguhr      |
| 7.  | Hardening heat treatment is commonly to (A) Stainless steel wire (D) Titanium wires                               | used for:<br>(B) Cobalt-chromium (Elgiloy) wires<br>(D) Nickel titanium wires      |
| 8.  | Which of the curing lamps does not requ<br>(A) LED and Argon LASER<br>(C) PAC and Argon LASER                     |  |
| 9.  | Self priming adhesives(primer and adhe following generations of Dentin bonding (A) Second (C) Fourth              | sive in single bottle) belong to which of the agents?  (B) Third  (D) Fifth        |
| 10. | Which of the following property is increa (A) Ductility (C) Hardness  | sed by softening heat treatment?<br>(B) Proportional limit<br>(D) Tensile strength |
| 11. | Which of the following is not a type of flu (A) Surface protection flux (C) Reducing flux                         | x used in dentistry?<br>(B) Film forming flux<br>(D) Solvent flux                  |

| 12. | Which of the following is not a desirable (A) Ductility (C) Corrosion resistance   | e property of orthodontic wires?  (B) Ease of joining  (D) Stiffness                           |  |
|-----|--|--|--|
| 13. | Debonding of metal brackets cemented (A) Cement bracket interface (C) Intra cement   | with resin cement usually occurs at: (B) Bracket tooth interface (D) At the wings of brackets  |  |
| 14. | 18-8 stainless steel is which form of sta<br>(A) Ferritic<br>(C) Martensitic   | inless steel?<br>(B) Austenitic<br>(D) Pertisitic  |  |
| 15. | Which of the following type of Elgiloy wi<br>(A) Blue<br>(C) Green   | res is the hardest:<br>(B) Yellow<br>(D) Red   |  |
| 16. | Which of the following statements is incorrect about NiTi wires?  (A) NiTi wires have excellent resiliency  (B) NiTi wires have good formability  (C) NiTi wires have good springback property  (D) NiTi wires have low modulus of elasticity  |  |  |
| 17. | Which of the following is not a transform (A) 15°C (C) 35°C  | nation temperature of copper NiTi wires:<br>(B) 25°C<br>(D) 40°C                               |  |
| 18. | The major difference between monocry their:  | stalline and polycrystalline brackets lies in  |  |
| 19. | <ul><li>(A) Optical clarity</li><li>(C) Biocompatibility</li><li>An optiflex wire is composed of the followance</li><li>EXCEPT:</li></ul>  | (B) Resistance to discoloration (D) Flexibility owing materials arranged in various layers,    |  |
|     | (A) Silicone dioxide<br>(C) Polycarbonate  | (B) Silicone resin<br>(D) Nylon  |  |
| 20. | The following material exhibits the prop (A) Zinc phosphate cement (C) Polycarboxylate cement  | erty of anticariogenicity:<br>(B) Zinc oxide eugenol cement<br>(D) Mineral trioxide aggeregate |  |
| 21. | The following statements about NiTi are true, EXCEPT:  (A) The corrosion resistance is due to the formation of TiO <sub>2</sub> (B) Corrosion of NiTi occurs on contact with Sodium hypochlorite  (C) The presence of fluoride ions decrease the corrosion resistance  (D) None of the above |  |  |
| 22. | Weld nugget is:  (A) Copper electrodes of spot welder  (B) Pressure applicators of spot welder  (C) The spot where the parts are joined  (D) Both 1 and 2  | together   |  |

| 23. | The lead- tin (Pb-Sn) alloy used as a soft solder is which type of alloy amongst the following:   |   |  |
|-----|---|---|--|
|     | (A) Peritectic alloy (C) Solid solution   | <ul><li>(B) Eutectic alloy</li><li>(D) Intermediate alloy</li></ul>               |  |
| 24. | Clinically satisfactory joints made by ele-<br>incorporating any solder can be achieve<br>(A) TMA<br>(C) Stainless steel  |   |  |
| 25. | The following materials can be used as a (A) Graphite (C) Rouge   | antiflux, EXCEPT:<br>(B) CaCO <sub>3</sub><br>(D) Granite                         |  |
| 26. | Palatine tonsil is related laterally to all of (A) Superior constrictor (C) Pharyngobasilar fascia  | the following structures except : (B) Stylopharyngeus (D) Pre-vertebral fascia    |  |
| 27. | Which of the following does not contribute to the development of tongue?  (A) Tuberculum impar  (B) Lingual swellings  (C) Caudal part of hypobranchial eminence  (D) Occipital myotomes  |   |  |
| 28. | Regarding the sensory innervation of face, which of the following nerve supplies the skin over the tip of the nose?  (A) Branch of the Maxillary Nerve  (B) Branch of the Nasociliary Nerve  (C) Branch of the Mandibular Division of the 5 <sup>th</sup> Nerve.  (D) Branch of the Ophthalmic Division of the 5 <sup>th</sup> Nerve. |   |  |
| 29. | All of the following nerves are present in the posterior triangle of neck, EXCEPT: (A) Roots and trunks of the brachial plexus (B) Supraclavicular nerves (C) Spinal part of the accessory nerve (D) Ansa cervicalis  |   |  |
| 30. | All of the following are condensations of the deep cervical fascia of the neck, EXCEPT:   |   |  |
|     | <ul><li>(A) Phayngobasilar Fascia</li><li>(C) Sphenomandibular ligament</li></ul>   | <ul><li>(B) Stylomandibular Ligament</li><li>(D) Buccopharyngeal Fascia</li></ul> |  |
| 31. | In the submandibular region, the facial artery gives all of the following arteries, EXCEPT:   |   |  |
|     | <ul><li>(A) Submental</li><li>(C) Ascending palatine</li></ul>  | (B) Tonsillar<br>(D) Inferior labial  |  |

| 32. | All of the following statements about the (A) The isthmus of the thyroid gland lies trachea.  | thyroid gland are true, EXCEPT: anterior to the 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> rings of the |
|-----|---|--|
|     | (B) The superior thyroid artery is closely nerve.   | associated with the external laryngeal   |
|     | <ul><li>(C) The inferior thyroid vein drains into t</li><li>(D) Lymph from the upper part of the glanders.</li></ul>  |  |
| 33. | Which of the following is NOT a bone of (A) Palatine bone (C) Sphenoid bones  | the neurocranium? (B) Parietal bone (D) Temporal bone  |
| 34. | Which of the following is NOT a bone of (A) Maxilla (C) Frontal bone  | the facial skeleton? (B) Zygomatic bone (D) Inferior nasal concha  |
| 35. |   | T take its origin from the common tendinous  |
|     | ring?<br>(A) Superior rectus<br>(C) Lateral rectus  | <ul><li>(B) Inferior rectus</li><li>(D) Superior oblique</li></ul>   |
| 36. | Which of the following bone does not co (A) Sphenoid (C) Palatine bone  | ntribute to the nasal septum?<br>(B) Lacrimal<br>(D) Ethmoid   |
| 37. | With regard to the muscles of mastication (A) They are supplied by the mandibular (B) The parotid duct crosses superficially (C) The maxillary artery lies deep to the (D) The medial pterygoid is related later.   | nerve.<br>y to the masseter.<br>temporalis.  |
| 38. | The mandibular nerve supplies all of the (A) Risorius (C) Mucous membrane of the lower lip  | (B) Skin of the chin   |
| 39. | Which of the following statement about Parotid Gland is INCORRECT?  (A) It lies deep to skin innervated by the great auricular nerve.  (B) Its duct enters the oral cavity opposite the second upper premolar tooth.  (C) It receives autonomic nerve fibres via the Otic Ganglion.  (D) It is traversed by branches of the facial nerve. |  |
| 40. | Which of the following nerve passes thro<br>(A) Olfactory<br>(C) Mandibular   | ough the foramen rotundum?<br>(B) Maxillary<br>(D) Ophthalmic  |
| 41. | Pus in space of the neck passes   | as much downward till the superior   |
|     | mediastinum. (A) Prevertebral (C) Parapharyngeal  | (B) Submandibular (D) Retropharyngeal  |

| 42. | Ptosis in Horner's syndrome is due to p the following muscle?                                   | aralysis of the smooth muscle part of which of  |
|-----|---|---|
|     | (A) Superior Rectus (C) Levator Palpebrae Superioris  | (B) Superior Oblique<br>(D) Orbicularis Oculi   |
| 43. | Damage to ganglion will cause (A) Otic (C) Stellate   | xerophthalmia:<br>(B) Ciliary<br>(D) Submandibular                                    |
| 44. | Which of the following muscle of the tor (A) Hyoglossus (C) Palatoglossus                       | ngue is innervated by the pharyngeal plexus? (B) Styloglossus (D) Intrinsic vertical  |
| 45. | Which of the following muscles raises the swallowing? (A) Digastric (C) Palatopharyngeus        | ne floor of the mouth in the first stage of  (B) Mylohyoid  (D) Levator veli palatine |
| 46. | Most common type of anaemia in India (A) Sickle cell anaemia (C) Thalassemia                    | is due to :<br>(B) Iron deficiency anaemia<br>(D) Hereditary spherocytosis            |
| 47. | A form of coordinated programmed cell (A) Apoptosis (C) Lysis                                   | death is called : (B) Necrosis (D) Cloning  |
| 48. | The largest WBC is: (A) Monocyte (C) Eosinophil   | (B) Neutrophil<br>(D) Basophil  |
| 49. | In adults, active red bone marrow is pre<br>(A) Skull<br>(C) Long bones                         | esent in all, EXCEPT :<br>(B) Vertebrae<br>(D) Sternum                                |
| 50. | Fibrinogen is converted into fibrin by : (A) Thrombin (C) Prothrombin activator                 | (B) Prothrombin (D) Calcium   |
| 51. | Repolarization in a motor nerve is due to (A) Influx of sodium ions (C) Influx of chloride ions | o :<br>(B) Efflux of potassium ions<br>(D) Efflux of calcium ions                     |
| 52. | Structural and functional unit of muscle (A) Sarcotubular system (C) Sarcolemma                 | e is:<br>(B) Sarcoplasmic reticulum<br>(D) Sarcomere                                  |
| 53. | 'P wave' in ECG is produced due to : (A) Atrial depolarization (C) Atrial repolarization        | (B) Ventricular depolarization (D) Ventricular repolarization                         |

| 54. | Pulmonary surfactant is produced by : (A) Type I alveolar cells (C) APUD cells  | (B) Type II alveolar cells (D) Mast cells                                       |
|-----|---|---|
| 55. | The normal tidal volume in a young indiv<br>(A) 150 ml<br>(C) 500 ml  | ridual is :<br>(B) 300 ml<br>(D) 1000 ml  |
| 56. | Influence of O <sub>2</sub> on release and uptake of (A) Bohr's effect (C) Reverse chloride shift   | f CO <sub>2</sub> by Hb is called :<br>(B) Chloride shift<br>(D) Haldane effect |
| 57. | The condition in which the lower esopha (A) Achalasia cardia (C) Peptic ulcer   | geal sphincter fails to relax is called :<br>(B) Gastritis<br>(D) Esophagitis   |
| 58. | The process of concentrating the urine is (A) Cortical nephron (C) Juxtamedullary nephron   | s the main function of :<br>(B) Descending loop of Henle<br>(D) Collecting duct |
| 59. | Which of the following is secrated by Jux (A) Rennin (C) Erythropoietin   | ktaglomerular apparatus?<br>(B) Renin<br>(D) Aldosterone                        |
| 60. | Which of the following is the receptor for (A) Muscle spindle (C) Pacinian corpuscles   | stretch reflex?<br>(B) Golgi tendon organ<br>(D) Ruffini's end organs           |
| 61. | Following are functions of hypothalamus (A) Fluid & water balance (B) Temperature regulation (C) Relay centre for different sensations (D) Control of feeding & satiety |   |
| 62. | Color vision is tested by : (A) Ishihara's chart (C) Jaeger's chart   | (B) Snellen's chart (D) Landold's chart   |
| 63. | Which of the following Hormone is release<br>(A) Growth hormone<br>(C) FSH  | sed from posterior pituitary?<br>(B) Vasopressin<br>(D) LH                      |
| 64. | Myxoedema occurs due to : (A) Hyperthyroidism in adults (C) Hypothyroidism in adults  | (B) Hyperthyroidism in children (D) Hypothyroidism in children                  |
| 65. | Trousseau's sign is characteristic featu (A) Tetanus (C) Cretinism  | re of :<br>(B) Tetany<br>(D) Cushing's disease                                  |

| 66. | A higher level of which of the following n of dental decay among children? (A) Magnesium   | nineral in water is associated with lower rate  (B) Fluoride           |
|-----|--|--|
|     | (C) Calcium  | (D) Chloride   |
| 67. | Which of the following change is not see<br>(A) Cell shrinkage<br>(C) Chromatic condensation   | en in apoptosis?<br>(B) Inflammation<br>(D) Cell death                 |
| 68. | All of the following are clinical features of (A) Tachycardia (C) Warm skin  | of shock, EXCEPT:<br>(B) Rapid and weak pulse<br>(D) Cyanosis          |
| 69. | All of the following are bone tumors, EXO<br>(A) Fibrous dysplasia<br>(C) Osteogenic sarcoma   | CEPT: (B) Ewing's sarcoma (D) Giant cell tumor of bone                 |
| 70. | Warthin tumour is:  (A) Adenolymphoma of parotid gland (B) Pleomorphic adenoma of parotid gla (C) Carcinoma of parotid gland (D) Myoepithelioma of parotid gland | nd   |
| 71. | Candidiasis is a complication of all, EXC<br>(A) Prolonged antibiotic therapy<br>(C) Immunosuppression   | EPT:<br>(B) Steroid therapy<br>(D) Aspiration pneumonia                |
| 72. | Red cell in β thalassemia are typically: (A) Normocytic hypochromic (C) Normocytic normochromic  | (B) Microcytic hypochromic (D) Macrocytic normochromic                 |
| 73. | Which of the following is not a cause of (A) Liver disease (C) Prolonged bleeding  |  |
| 74. | Type II diabetes is not characterized by: (A) Absolute insulin deficiency (C) High blood sugar   | (B) Insulin resistance (D) Relative insulin deficiency                 |
| 75. | Which of the following is not a risk factor (A) Betal chewing (C) High fibre diet  | for oral squamous cell carcinoma:<br>(B) Smoking<br>(D) Leukoplakia    |
| 76. | Proton pump inhibitors are most effective (A) After meals (C) Along with H2 blockers   | e when they are given:<br>(B) Shortly before meals<br>(C) During meals |
| 77. | The most commonly used local anaesthe (A) Benzocaine (C) Cocaine   | etic agent is:<br>(B) Ropivacaine<br>(D) Lignocaine                    |

| 78. | Tramadol is<br>(A) Antacid<br>(C) Antibiotic   | (B) Opioid analgesic<br>(D) Antifungal agent   |
|-----|--|--|
| 79. | Dental discoloration can be caused by : (A) Doxycycline (C) Clindamycin  | (B) Amoxicillin (C) Ciprofloxacin  |
| 80. | Nitrates are not used in : (A) Congestive cardiac failure (C) Renal colic  | (B) Esophageal spasm (D) Cyanide poisoning   |
| 81. | Patients suffering from multidrug resista following drugs, EXCEPT: (A) Tobramycin (C) Ciprofloxacin  | nt tuberculosis can be treated with all the  (B) Amikacin  (D) Clarithromycin                                    |
| 82. | Drug of choice for acute attack of asthm (A) Ipatropium Bromide (C) Atropine   | a is:<br>(B) Salbutamol<br>(D) Aminophylline   |
| 83. | Which of the following Antimicrobials ha<br>(A) Cefpodoxime proxetil<br>(C) Cefotetan  | s antipseudomonal action?<br>(B) Ceforanide<br>(D) Cefoperazone  |
| 84. | A diabetic patient developed tooth absorbataphylococcus aureus. All the following (A) Vancomycin (C) Imipenem  | ess due to methicillin resistant<br>antibiotics will be appropriate, EXCEPT:<br>(B) Teicoplanin<br>(D) Linezolid |
| 85. | Which of the following over-the-counter<br>the anti-hypertensive effect of ACE inhib<br>(A) Paracetamol<br>(C) Naproxen  | analgesic has LEAST potential for reducing bitors?  (B) Aspirin  (D) Ibuprofen                                   |
| 86. | Intake of which of the following is associ<br>(A) Phenytoin<br>(C) Valproate   | ated with neural tube defects?<br>(B) Lithium<br>(D) Phenobarbitone  |
| 87. | Eugenol when sealed in a root canal preparation causes severe tissue damage: (A) Without pain as it has analgesic effect (B) Without pain as it has local anesthetic effect (C) Because it has corrosive effect (D) With local bleeding also |  |
| 88. | Which of the following statements is least (A) It is useful in reducing plaque format (B) It can cause staining of the teeth (C) There is increased formation of calc. (D) It is not effective in gingivitis                                 | ion  |

| 89. | Epinephrine added to a solution of lidocaine for local anaesthesia will:  (A) Cause cyanosis locally (B) Increase the duration of local anaesthesia (C) Increase the risk of convulsions (D) Increase the absorption of lidocaine   |   |
|-----|---|---|
| 90. | The most serious adverse effect of using (A) Diarrhoea (C) Hypertension   | g Fentanyl patches is :<br>(B) Skin reactions<br>(D) Respiratory depression                                   |
| 91. | The function of fluoride flux during soldering of stainless steel is:  (A) To form a surface protective layer  (B) To decrease the melting point  (C) To dissolve chromic oxide layer  (D) None of the above  |   |
| 92. | Which one of the following is the result of elasticity on a load deflection diagram (A) Fracture of wire (C) Spring back  | of applying a load to a wire below its modulus<br>?<br>(B) Permanent deformation<br>(D) Increase in stiffness |
| 93. | Which of the following metal alloy cause (A) Nickel (C) Chromium  | s carcinoma?<br>(B) Cobalt<br>(D) Carbon  |
| 94. | The commonly used LASER for curing composite resins is :  (A) ND:YAG  (B) CO2  (C) ER:YAG  (D) Argon  |   |
| 95. | Space lattice refers to: (A) Inter atomic movement (C) Arrangement of atoms   | (B) Inter atomic balance (D) Arrangement of molecules   |
| 96. | Dimensional stability of elastomeric impression material can be given in descending order as:  (A) Polysulphide > Polyether > Condensation silicone > Addition Silicone  (B) Polyether > Condensation silicone > Polysulphide > Addition Silicone  (C) Addition Silicone > Polyether > Polysulphide > Condensation silicone  (D) Addition Silicone > Condensation silicone > Polysulphide > Polyether |   |
| 97. | Passivating alloys are: (A) Cr,Al,Ti (C) Cr, Gold, Ti   | (B) Cr,Mo,Ti<br>(D) Cr, Fe ,Ti  |
| 98. | For photocuring of the composite resin, (A) Should be held at one millimeter dist (B) Needs no protection while in use (C) Will cure composite upto a depth of (D) Is fibre optic   | ance from the composite resin   |

- 99. Placing cast under tap water should be avoided as:
  - (A) H<sub>2</sub>O interferes with hygroscopic expansion
  - (B) H<sub>2</sub>O inhibits polymerization of dental resin
  - (C) H<sub>2</sub>O interferes with the crystallization of dehydrate
  - (D) Gypsum is slightly soluble in water and the surface of cast will be eroded
- 100. Sensitization of stainless steel occurs when it is heated at higher temperatures due to:
  - (A) Precipitation of iron carbide
- (B) Precipitation of chromium carbide
- (C) Precipitation of nickel carbide
- (D) Precipitation of cobalt carbide