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PROVISIONAL ANSWER KEY [CBRT]

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Instructions / સૂચના

Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -

- (1) All the suggestion should be submitted in prescribed format of suggestion sheet Physically.
- (2) Question wise suggestion to be submitted in the prescribed format (Suggestion Sheet) published on the website.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.
- (4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.
- (5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed.
- (6) Objection for each question shall be made on separate sheet. Objection for more than one question in single sheet shall not be considered & treated as cancelled.

ઉમેદવારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં

- (1) ઉમેદવારે વાંધા-સૂચનો નિયત કરવામાં આવેલ વાંધા-સૂચન પત્રકથી રજૂ કરવાના રહેશે.
- (2) ઉમેદવારે પ્રશ્નપ્રમાણે વાંધા-સૂચનો રજૂ કરવા વેબસાઈટ પર પ્રસિધ્ધ થયેલ નિયત વાંધા-સૂચન પત્રકના નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ ન કરતા તમામ વાંધા-સૂચનો વેબસાઈટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્ર માં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચન ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે જે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીની જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચન ધ્યાનમાં લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચન પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

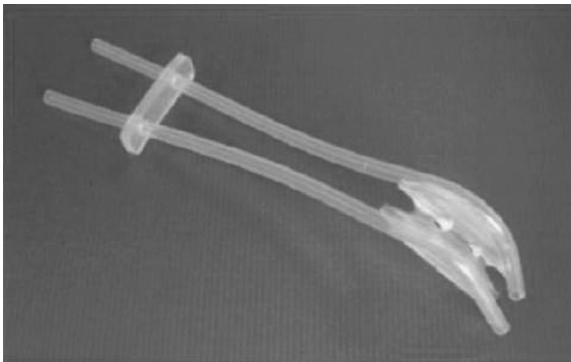
001. Most common site of Nasopharynx
 (A) Fossa of Rosen muller (B) Eustachian tube
 (C) Sinus of Morgagni (D) Torus tubarius
002. Most common noncutaneous malignancy of the head and neck
 (A) Oropharynx (B) Hypopharynx
 (C) Larynx (D) Oral Cavity
003. All the following nerves pass through Superior orbital Fissure except
 (A) Optic Nerve (B) Oculomotor Nerve
 (C) Abducent Nerve (D) Trochlear Nerve
004. Aspergillus flavus associated with
 (A) HCC (B) RCC
 (C) SCC (D) BCC
005. Delphian Lymphnodes are
 (A) Pre Laryngeal Lymphnodes (B) Retropharyngeal Lymphnodes
 (C) Jugulodigastric Nodes (D) Submandibular Lymphnodes
006. All are subsites of Supraglottis except
 (A) Epiglottis (B) False Cords
 (C) Commissures (D) Aryepiglottic folds
007. Superior thyroid artery is a branch of
 (A) External carotid artery (B) Internal carotid artery
 (C) Maxillary artery (D) Facial artery
008. Most common symptom of Carcinoma Nasopharynx
 (A) Mass in the Nasal Cavity (B) Epistaxis
 (C) Nasal Discharge (D) Neck mass
009. The thoracic esophagus extends from approximately the level of
 (A) T1-T10 (B) T2-T10
 (C) T3-T10 (D) C1-C8
010. The length of the anal canal
 (A) 3 cm (B) 7 cm
 (C) 10 cm (D) 15 cm
011. Cranial to Caudal Radiological Boundary of the Level II lymphnode
 (A) Caudal edge of lateral process of C1 to Caudal edge of body of hyoid bone
 (B) Cranial edge of lateral process of C1 to Cranial edge of body of hyoid bone
 (C) Caudal edge of cricoid cartilage to cranial edge of body of Hyoid bone
 (D) Caudal edge of cricoid cartilage to caudal edge of body of Hyoid bone

012. Investigation of choice for staging modality in pancreatic cancer
 (A) MRI SCAN (B) CT SCAN
 (C) ERCP (D) EUS
013. Milans Criteria used for
 (A) GIST (B) HCC
 (C) RCC (D) Rhabdomyosarcoma
014. Most sensitive test for Seminoma
 (A) Beta hcg (B) AFP
 (C) PLAP (D) LDH
015. "DEAUVILLE SCORE" 3 means,
 (A) Uptake moderately higher than liver
 (B) Uptake > mediastinum but ≤ liver
 (C) Uptake markedly higher than liver and/or new lesions
 (D) New areas of uptake unlikely to be related to lymphoma
016. On electron microscopy, Birbeck granules are seen in
 (A) Langerhans Cell Histiocytosis (B) Hepatoblastoma
 (C) Juvenile Nasopharyngeal angiofibroma (D) Carotid body tumor
017. According to RADIATION THERAPY ONCOLOGY GROUP RECURSIVE PARTITIONING ANALYSIS (RPA) OF MALIGNANT GLIOMA class I and II have median survival of
 (A) 11-18 months (B) 21-28 months
 (C) 31-38 months (D) 41-48 months
018. According to FRENCH-AMERICAN-BRITISH (FAB) CLASSIFICATION OF ACUTE MYELOGENOUS LEUKEMIA (AML) - M3 is
 (A) acute monocytic leukemia (B) acute myeloid leukemia
 (C) acute megakaryocytic leukemia (D) acute promyelocytic leukemia
019. Typical dose rates for RIT (Radioimmunotherapy) are in the range of
 (A) 5-10 cGy/hr (B) 10-20 cGy/hr
 (C) 1-2 Gy/hr (D) 50-60 cGy/hr
020. Most common cause of cancer death Worldwide
 (A) Lung Cancer (B) Breast Cancer
 (C) Prostate Cancer (D) Brain Cancer
021. Risk of Malignancy in BIRADS category 3
 (A) < 5% (B) < 4%
 (C) < 3% (D) < 2%
022. Which of the following skin cancer found to be associated with Polyoma Virus Infection
 (A) Adnexal Carcinoma (B) Keratoacanthoma
 (C) Merkel Cell Carcinoma (D) Verrucous carcinoma

023. Tumor Size > 2.0 – 4.0 mm with ulceration in Malignant Melanoma according TNM staging
 (A) T2b (B) T3a
 (C) T3b (D) T4a
024. Allelic loss of 1p and 19q seen in
 (A) GBM (B) Astrocytoma
 (C) Medulloblastoma (D) Oligodendroglioma
025. In Medulloblastoma, Patients are classified as “average risk” if there is
 (A) No dissemination (B) SHH tumors
 (C) > 1.5 cm² residual (D) WNT tumors
026. Most Common subtype of Pituitary Adenoma
 (A) Growth hormone adenoma (B) Gonadotroph adenoma
 (C) Plurihormonal adenoma (D) Prolactinoma
027. Reese-Ellsworth (R-E) classification, used for
 (A) Ewings Sarcoma (B) Renal Cell Carcinoma
 (C) Retinoblastoma (D) GIST
028. Peri neural Invasion is common in
 (A) Salivary Duct tumor (B) Adenoid Cystic Carcinoma
 (C) Warthins tumor (D) Mucoepidermoid Carcinoma
029. The most common site of Carcinoma Hypopharynx
 (A) Soft Palate (B) Post Cricoid Region
 (C) Posterior Pharyngeal Wall (D) Pyriform Sinus
030. Standard of Treatment for Stage I glottis Cancer
 (A) Definitive Chemotherapy (B) Definitive Radiotherapy
 (C) Chemoradiation (D) Surgery followed by Chemoradiation
031. MOST COMMON SITE OF Stomach Cancer
 (A) Antrum (B) Body
 (C) GE junction (D) Cardia
032. Chronic infection of Opisthorchisviverrini associated with
 (A) Pancreatic Cancer (B) Stomach Cancer
 (C) Colon Cancer (D) Biliary duct Cancer
033. Klatskin tumors is
 (A) GIST (B) Perihilar Cholangiocarcinoma
 (C) Intrahepatic Cholangiocarcinoma (D) Mucinous Carcinoma stomach
034. The metabolic half-life of AFP is
 (A) 2 days (B) 5 days
 (C) 8 days (D) 10 days

035. Tumor invading into corpus spongiosum in Penile Cancer stage
 (A) T1 (B) T2
 (C) T3 (D) T4
036. Most common type of Endometrial Carcinoma
 (A) Endometroid Carcinoma (B) Mucinous carcinoma
 (C) Squamous cell carcinoma (D) Transitional cell carcinoma
037. Call Exner Bodies are seen in
 (A) Granulosa cell tumor (B) Sex cord stromal tumor
 (C) Yolk sac tumor (D) Brenner tumor
038. According to "ANN ARBOR STAGING" Stage II is,
 (A) Involvement of a single lymph node region
 (B) Involvement of two or more lymph node regions on the same side of the diaphragm
 (C) Involvement of lymph node regions on both sides of the diaphragm
 (D) Diffuse or disseminated involvement of one or more extralymphatic organs or tissues
039. The most common "indolent" lymphoma
 (A) Marzinal zone lymphoma (B) Follicular Lymphoma
 (C) Burkits Lymphoma (D) Plasmoblastic Lymphoma
040. The most common site of MALT is
 (A) Ileum (B) Lung
 (C) Appendix (D) Stomach
041. Half life of Cesium 137 is
 (A) 15 years (B) 30 years
 (C) 45 years (D) 60 years
042. Annihilation Radiation produced by following process
 (A) Compton effect (B) Photoelectric effect
 (C) Coherent scattering (D) Pair Production
043. SI Unit of Radiation exposure
 (A) Gray (B) Curie
 (C) Coulomb per kilogram (C/kg) (D) Bequerel
044. Required Lead Thickness FOR SHIELDING FOR Cobalt-60
 (A) 4 cm (B) 5 cm
 (C) 6 cm (D) 6.5 cm
045. NCRP recommendation for annual occupational Exposure
 (A) 50 mSv (B) 20 mSv
 (C) 100 mSv (D) 5 mSv
046. dmax for 6MeV energy
 (A) 0.5 cm (B) 1 cm
 (C) 1.5 cm (D) 2 cm

047. Internal Target Volume (ITV) concept was introduced in
 (A) ICRU Report.40 (B) ICRU Report.50
 (C) ICRU Report.62 (D) ICRU Report.83
048. FLASH radiotherapy involves
 (A) Hyper-fractionated Radiotherapy
 (B) The ultra-fast delivery of radiation treatment at dose rates greater than routine clinical practice
 (C) Type of High Dose Rate Brachytherapy
 (D) Pulse Dose rate Brachytherapy
049. Instrument shown in the picture is used for the Brachytherapy treatment of



- (A) Endometrial Cancer (B) Hepatocellular Carcinoma
 (C) Nasopharyngeal Carcinoma (D) Carcinoma Oropharynx
050. SRS prescription dose for AV Malformations generally range from
 (A) 8-16 Gy (B) 16-24 Gy
 (C) 28-32 Gy (D) 36-40 Gy
051. Myeloablative dose of Total body irradiation
 (A) 6-10 Gy (B) 12-15 Gy
 (C) 20-25 Gy (D) 45-50 Gy
052. Isotopes are
 (A) atoms with the same Z, different number of neutrons
 (B) atoms with the same number of neutrons, different Z
 (C) atoms with the same A, different Z
 (D) atoms with the same A and same Z but different nuclear energy states
053. The mean lethal dose for loss of proliferative capacity is usually less than
 (A) 1 Gy (B) 2 Gy
 (C) 3 Gy (D) 4 Gy

054. Linear Energy Transfer (LET) is
 (A) The energy transferred per unit length of the Cell
 (B) The energy transferred per unit length of the Body
 (C) The energy transferred per unit Gray of the track
 (D) The energy transferred per unit length of the track
055. Permanent sterility in the male requires a single dose in excess of
 (A) 0.5 Gy (B) 1 Gy
 (C) 6 Gy (D) 16 Gy
056. ICRU means
 (A) Indian Commission on Radiation Units and Measurements
 (B) International Commission on Radiation Units and Monitoring
 (C) Indian Commission on Radiation Units and Monitoring
 (D) International Commission on Radiation Units and Measurements
057. SI unit of committed effective dose
 (A) Gray (B) Bequerel
 (C) Roentzen (D) Seivert
058. A Supervoltage therapy or endocavitary machine operates at potentials of
 (A) 10-20 kv (B) 20-40 kv
 (C) 100-1000 kv (D) 1000-2000 kv
059. The Gray is a unit of
 (A) Absorbed dose (B) Radioactivity
 (C) Radiation Exposure (D) Equivalent dose
060. Half-life of Palladium 103 is
 (A) 7 days (B) 17 days
 (C) 27 days (D) 37 days
061. Concept of "inverse planning" used in
 (A) IMRT (B) SRS
 (C) SBRT (D) 3DCRT
062. Bragg peak phenomenon seen with
 (A) Proton (B) Photon
 (C) Electron (D) Oxygen
063. The current protocol for the absorbed dose calibration of proton beams is the IAEA Report
 (A) 395 (B) 396
 (C) 397 (D) 398
064. APC gene located on the chromosome
 (A) 5 (B) 6
 (C) 7 (D) 8

065. Most common histology of Biliary tract cancer
 (A) Adenocarcinoma (B) Transitional cell carcinoma
 (C) Squamous cell carcinoma (D) Sarcoma
066. Amstedram criteria used in
 (A) Penile cancer (B) Renal Cancer
 (C) Colorectal cancer (D) Lung cancer
067. How many lymphnodes to be removed for accrual staging of the colon cancer
 (A) 10 (B) 12
 (C) 16 (D) 20
068. Nigro, et al. is the landmark study for Carcinoma
 (A) Anal canal (B) Rectum
 (C) Penis (D) Endometrium
069. Bilateral Salphingo Oophorectomy usually done in BRCA mutated women at the age of
 (A) 25 (B) 35
 (C) 45 (D) 55
070. Chemopreventive drug of choice in Carcinoma breast
 (A) Anastrazole (B) Trastuzumab
 (C) Raloxifene (D) Tamoxifene
071. Dose of Doxorubicin in dose dense AC regimen in breast cancer
 (A) 50 mg (B) 60 mg
 (C) 70 mg (D) 80 mg
072. Trastuzumab causing Cardiomyopathy Type
 (A) I (B) II
 (C) III (D) IV
073. Obintuzumab is a monoclonal antibody against CD
 (A) 20 (B) 25
 (C) 30 (D) 45
074. Vencloxx is a
 (A) Antiapoptotic protein against BCL1 (B) Antiapoptotic protein against BCL3
 (C) Antiapoptotic protein against BCL2 (D) Antiapoptotic protein against BCL4
075. Larotrectinib is
 (A) NTRK receptor antagonist (B) Topoisomerase 1 inhibitor
 (C) Topoisomerase 2 inhibitor (D) ROS1 fusion inhibitor
076. Mitoxantrone is
 (A) NTRK receptor antagonist (B) MEK pathway inhibitor
 (C) Topoisomerase 2 inhibitor (D) ROS1 fusion inhibitor

077. Gravids tumor is
 (A) HCC (B) Seminoma
 (C) Ovarian cancer (D) RCC
078. Most common symptom of RCC
 (A) mass (B) pain
 (C) haematuria (D) weight loss
079. Hand foot syndrome is caused by
 (A) 5FU (B) Paclitaxel
 (C) Cisplatin (D) Cyclophosphamide
080. Most common electrolyte toxicity of cisplatin
 (A) Hypokalemia (B) Hypomagnesemia
 (C) Hyponatremia (D) Hypocalcemia
081. Krunkenberg tumor seen in
 (A) GIST (B) Stomach Cancer
 (C) Intrahepatic Cholangiocarcinoma (D) Mucinous Carcinoma stomach
082. Standard of treatment of resectable T1 Rectal Cancer
 (A) Preoperative Chemoradiation followed by Surgery
 (B) Surgery alone
 (C) Surgery followed by adjuvant Chemoradiation
 (D) Surgery followed by adjuvant Chemotherapy
083. All are features of High risk Prostate Cancer except
 (A) PSA of 20 ng/mL (B) T4a disease
 (C) T3 disease (D) Gleason score of 6
084. According to TWO-PATHWAY MODEL OF EPITHELIAL OVARIAN CARCINOGENESIS, all are feautres of Type 1 Ovarian tumors except
 (A) Usually low grade (B) Chromosomally stable
 (C) Usually platinum sensitive (D) Wild-type p53 status
085. According to “ANN ARBOR STAGING” Stage III is
 (A) Involvement of a single lymph node region
 (B) Involvement of two or more lymph node regions on the same side of the diaphragm
 (C) Involvement of lymph node regions on both sides of the diaphragm
 (D) Diffuse or disseminated involvement of one or more extralymphatic organs or tissues
086. Classic Hodgkins lymphoma with best prognosis
 (A) Lymphocyte-depleted Hodgkin lymphoma
 (B) Lymphocyte-rich Hodgkin lymphoma
 (C) Mixed cellularity Hodgkin lymphoma
 (D) Nodular sclerosis
087. t(11.14) seen in
 (A) Mantle cell lymphoma (B) Follicular Lymphoma
 (C) Burkits Lymphoma (D) Plasmoblastic Lymphoma

088. t(11.22) seen in
 (A) Marginal zone lymphoma (B) Follicular Lymphoma
 (C) Burkitt's Lymphoma (D) Ewing's sarcoma
089. Clue cells seen in
 (A) AML (B) ALL
 (C) CML (D) CLL
090. Most common histology of Rhabdomyosarcoma
 (A) Alveolar RMS (B) Pleomorphic RMS
 (C) Hepatoblastoma (D) Embryonal RMS
091. KARNOFSKY PERFORMANCE STATUS-0 is
 (A) Dead
 (B) Very ill; hospitalization and active supportive care necessary
 (C) Able to carry on normal activity; minor signs or symptoms of disease
 (D) Normal, no complaints; no evidence of disease
092. According to ESMO guidelines, Febrile Neutropenia is defined as
 (A) neutropenia with a single oral temperature greater than or equal to 101°F (38.3°C) or greater than or equal to 100.4°F (38°C) for at least one hour and absolute neutrophil count (ANC) of 500 cells/mm³ or less than 1,000 cells/mm³ with an anticipated decline to less than 500 cells/mm³ within 48 hours.
 (B) neutropenia with a single oral or tympanic temperature greater than or equal to 101°F (38.3°C) or greater than or equal to 100.4°F (38°C) for at least 24 hours and absolute neutrophil count (ANC) of 500 cells/mm³ or less than 1,000 cells/mm³ with an anticipated decline to less than 500 cells/mm³ within 24 hours.
 (C) neutropenia with a single oral or tympanic temperature greater than or equal to 101°F (38.3°C) or greater than or equal to 100.4°F (38°C) for at least 24 hours and absolute neutrophil count (ANC) of 500 cells/mm³ or less than 1,000 cells/mm³ with an anticipated decline to less than 500 cells/mm³ within 48 hours.
 (D) neutropenia with a single oral or tympanic temperature greater than or equal to 101°F (38.3°C) or greater than or equal to 100.4°F (38°C) for at least one hour and absolute neutrophil count (ANC) of 500 cells/mm³ or less than 1,000 cells/mm³ with an anticipated decline to less than 500 cells/mm³ within 24 hours.
093. High Emetogenic Potential Drug
 (A) Dacarbazine (B) Doxorubicin
 (C) Docetaxel (D) Paclitaxel
094. Principles for Combination Chemotherapy Regimens are all except
 (A) All drugs must have single agent activity
 (B) Drugs should have different mechanisms of action
 (C) Drugs should have overlapping toxicity
 (D) Drugs should have different mechanisms or patterns of resistance

095. Monoclonal Antibody against CD33 is
 (A) Ofatumumab (B) Almetuzumab
 (C) Brentuximab (D) Gemtuzumab
096. Dose of Sunitinib in Metastatic RCC
 (A) 50 mg once daily (B) 50 mg twice daily
 (C) 100 mg once daily (D) 100 mg twice daily
097. Most common symptom of wilms tumor
 (A) Mass (B) Fever
 (C) Haematuria (D) Pain
098. Adjuvant treatment for Stage I Seminoma
 (A) 2 cycles of carboplatin (B) 4 cycles of carboplatin
 (C) 2 Cycles of BEP regimen (D) 4 Cycles of BEP regimen
099. Tumor invading the testis and epididymis with LVSI in Testicular cancer comes under the stage
 (A) pT2 (B) pT3
 (C) pT4 (D) m1
100. Extraprostatic tumor that is not fixed or does not invade adjacent structures, in T staging of Prostate cancer
 (A) T2 (B) T3
 (C) T4 (D) m1
101. Most common site of Prostate cancer
 (A) Anterior lobe (B) Posterior lobe
 (C) Lateral lobe (D) Median lobe
102. According to Revised FIGO staging for carcinoma of the cervix uteri stage IB1 is
 (A) Invasive carcinoma Measured stromal invasion ≥ 3 mm and < 5 mm in depth
 (B) Invasive carcinoma ≥ 5 mm depth of stromal invasion and < 2 cm in greatest dimension
 (C) Invasive carcinoma 2 cm to 4 cm in greatest dimension
 (D) Invasive carcinoma > 4 cm in greatest dimension
103. In FIGO staging of Ovarian Cancer, Macroscopic peritoneal metastases involving extrapelvic surfaces more than 2 cm in greatest dimension, with or without retroperitoneal nodal involvement will be staged as
 (A) IIB (B) IIIA
 (C) IIIB (D) IIIC
104. "DEAUVILLE SCORE" 4 means,
 (A) Uptake moderately higher than liver
 (B) Uptake $>$ mediastinum but \leq liver
 (C) Uptake markedly higher than liver and/or new lesions
 (D) New areas of uptake unlikely to be related to lymphoma

105. "triple" IT therapy used in
 (A) ALL (B) AML
 (C) CML (D) CLL
106. Richter syndrome seen in
 (A) AML (B) ALL
 (C) CML (D) CLL
107. t(12, 16) seen in
 (A) Synovial Sarcoma (B) Myxoid Liposarcoma
 (C) Clear cell sarcoma (D) Ewings Sarcoma
108. Lymph node involvement seen in all except
 (A) Liposarcoma (B) Rhabdomyosarcoma
 (C) Clear cell sarcoma (D) Angiosarcoma
109. Esthesioneuroblastoma arises from
 (A) Neural Crest (B) Notochord
 (C) Olfactory Nerve (D) Optic Nerve
110. Tumor arising from remnants of Rathke pouch
 (A) Pituitary Adenoma (B) Craniopharyngioma
 (C) Juvenile Nasopharyngeal angiofibroma (D) Schwannoma
111. Most common symptom of Brain Metastasis
 (A) Seizures (B) Motor weakness
 (C) Vomiting (D) Headache
112. MIRELS SCORING SYSTEM used for
 (A) Prediction of Seizures risk in Brain metastasis
 (B) Prediction of GI bleed in Stomach Cancer
 (C) Prediction of pathologic fracture risk in Bone metastasis
 (D) Prediction of secondary malignancy risk in RT patients
113. Carey Bishop Scoring used for
 (A) SVC syndrome (B) SIADH
 (C) Tumor Lysis Syndrome (D) Spinal Cord Compression
114. Contraindications for Bone Marrow aspiration are all except
 (A) DIC (B) Haemophilia
 (C) Haematologic Malignancy (D) Skin Infection
115. Lifetime risk of developing Colon Cancer in HNPCC
 (A) 20-30% (B) 40-50%
 (C) 70-80% (D) 100%

116. Most common Molecular alteration seen in NSCLC
 (A) EGFR (B) KRAS
 (C) ALK (D) ROS
117. The incidence of brain metastasis in small cell lung cancer at 2 years
 (A) 20% (B) 40%
 (C) 60% (D) 80%
118. All are features of Basal type Breast Cancer except
 (A) Do not express ER, PR, HER2 in 85% cases
 (B) Tend to be high grade
 (C) Usually Chemoresistant
 (D) High relapse rate
119. All are features of Halsted Hypothesis except
 (A) No Orderly pattern of tumor cell deposition
 (B) The positive lymphnode is an indicator of Tumor spread and it is the instigator of disease
 (C) Opearble breast cancer is locoregional disease
 (D) The bold stream is of little significance in tumor spread
120. Most common histologic type of thyroid carcinoma
 (A) Papillary (B) Follicular
 (C) Medullary (D) Anaplastic
121. RET gene present on chromosome number
 (A) 5q11 (B) 10q11
 (C) 15q11 (D) 17q11
122. Most common extracranial tumor of childhood
 (A) Neuroblastoma (B) Nephroblastoma
 (C) Rhabdomyosarcoma (D) Wilms tumor
123. Most common symptom of neuroblastoma
 (A) Pain (B) Mass
 (C) Sensory neuropathy (D) Autonomic dysfunction
124. Most common symptom of Ewings sarcoma
 (A) Swelling (B) Pain
 (C) Immobility of joint (D) Stiffness
125. Most common primary site for brain metastasis
 (A) Lung (B) Breast
 (C) Head and neck (D) Liver
126. Mirels scoring system used for
 (A) Pathological fracture risk (B) Risk of recurrence in breast cancer
 (C) Risk of recurrence in prostate cancer (D) Pain scoring system

127. Tumor invading the spermatic cord in Testicular cancer comes under the stage
(A) pT2 (B) pT3
(C) pT4 (D) m1
128. Most common histology of Anal Carcinoma
(A) Adenocarcinoma (B) Squamous cell carcinoma
(C) Transitional Carcinoma (D) Carcinosarcoma
129. Atomic number of Radium
(A) 220 (B) 225
(C) 230 (D) 235
130. Apoptosis was first described by
(A) Leksell (B) Kerr
(C) Rutherford (D) Einstein
131. Gene affected in Fanconi Anemia (FA)
(A) FANCD1 (B) FANCD 2
(C) FANCD3 (D) FANCD4
132. Oligospermia results in dose above
(A) 0.15 Gy (B) 0.5 Gy
(C) 5 Gy (D) 15 Gy
133. The minimum dose required to produce a progressive cataract is about
(A) 12 Gy (B) 22 Gy
(C) 0.2 Gy (D) 2 Gy
134. Early transient erythema, which may occur in a matter of hours following doses of more than
(A) 1 Gy (B) 2 Gy
(C) 3 Gy (D) 4 Gy
135. ARCON stands for
(A) Accelerated radiotherapy with Carbogen and Nicotinamide
(B) Accelerated radiotherapy with Carbogen and Niacin
(C) Accelerated radiotherapy with Carbogen and Nickel
(D) Accelerated radiotherapy with Carbogen and Nicotine
136. Barium contrast studies started in the year
(A) 1910s (B) 1920s
(C) 1930s (D) 1940s
137. Half life of Cobalt 60 is
(A) 15 years (B) 5 years
(C) 10 years (D) 7 years

138. Which of the following ICRU concept related to brachytherapy
 (A) ICRU Report.40 (B) ICRU Report.50
 (C) ICRU Report.38 (D) ICRU Report.83
139. The Post marketing surveillance of the drug is evaluated in the following phase of the clinical trial
 (A) Phase 0 (B) Phase 1
 (C) Phase 2 (D) Phase 4
140. Neutron beams used in BORONNEUTRONCAPTURETHERAPY(BNCT) are
 (A) High Energy Neutron beams (B) Low Energy Neutron beams
 (C) Moderate Energy Neutron beams (D) None of the above
141. PERMANENTLY IMPLANTED RADIONUCLIDE is
 (A) Strontium (B) C 060
 (C) 103 Pd (D) Ir 192
142. Major pathway of PDT (Photodynamic Therapy) mediated cytotoxicity
 (A) Necrosis (B) Autophagy
 (C) Apoptosis (D) Mitotic cell death
143. What appears hyperintense in T2 MRI ?
 (A) Fat (B) Bones
 (C) Water (D) Hemosiderin
144. Radiation exposure in one barium meal is ?
 (A) 3 mSv (B) 6 mSv
 (C) 5 mSv (D) 10 mSv
145. ALARA means
 (A) As low as reasonably achievable (B) As low as reasonably acceptable
 (C) As low as radiologically achievable (D) As low as radiologically acceptable
146. A contact therapy or endocavitary machine operates at potentials of
 (A) 10-20 kv (B) 20-40 kv
 (C) 100-200 kv (D) 200-50 kv
147. The roentgen is a unit of
 (A) Absorbed dose (B) Radioactivity
 (C) Radiation Exposure (D) Equivalent dose
148. Prescription Dose rate of LDR Brachytherapy
 (A) 0.4-2 Gy/hr (B) 2-10 Gy/hr
 (C) 10-12 Gy/hr (D) None of the above
149. Iodine 125 emits
 (A) Alpha rays (B) Beta rays
 (C) Gamma rays (D) Xrays

150. According to the Big Bang Theory, the first element to form in the universe
 (A) Carbon (B) Oxygen
 (C) Nitrogen (D) Hydrogen
151. RBE of proton
 (A) 1.1 (B) 2.2
 (C) 3.3 (D) 4.4
152. Treatment of Choice for Pilocytic Astrocytoma
 (A) Surgery (B) Surgery followed by adjuvant RT
 (C) Surgery followed by adjuvant CT (D) Surgery followed by adjuvant RTCT
153. ECOG score 2 is,
 (A) Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light housework, office work
 (B) Ambulatory and capable of all selfcare but unable to carry out any work activities; up and about more than 50% of waking hours
 (C) Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours
 (D) Fully active
154. Dural tail sign seen in
 (A) Oligodendroglioma (B) Astrocytoma
 (C) Medulloblastoma (D) Meningioma
155. Investigation of choice for brain tumors
 (A) MRI (B) CT
 (C) PET CT (D) MR spectroscopy
156. According to RECIST 1.1, Partial response means,
 (A) $\geq 30\%$ decrease in the sum of the longest diameters of target lesions compared with baseline
 (B) $\geq 20\%$ decrease in the sum of the longest diameters of target lesions compared with baseline
 (C) $\geq 50\%$ decrease in the sum of the longest diameters of target lesions compared with baseline
 (D) $\geq 90\%$ decrease in the sum of the longest diameters of target lesions compared with baseline
157. Following chemotherapy regimens is not used for CTRT
 (A) Cisplatin 40 mg per sqm per wk (B) Wkly carboplatin AUC2
 (C) Cisplatin 100 mg per sqm q3wkly (D) 3 wkly carboplatin AUC 5 – 6
158. Concurrent chemoradiotherapy (CCRT) showed an improvement of _____ % in overall survival compared with radiation alone in patients below 70 years of age
 (A) 15.5% at 2 years (B) 21.5% at 5 years
 (C) 4.5% at 5 years (D) 9.5% at 5 years
159. Evorilimus is a
 (A) mTOR inhibitor (B) MEK inhibitor
 (C) pdL1 inhibitor (D) BRAF inhibitor

160. Dabrafenib is a
 (A) mTOR inhibitor (B) MEK inhibitor
 (C) pdL1 inhibitor (D) BRAF inhibitor
161. ATRX deficiency seen in
 (A) Astrocytoma (B) Oligodendroglioma
 (C) Ependymoma (D) Meningioma
162. RELA fusion are seen in
 (A) Cortical glioma (B) Oligodendroglioma
 (C) Ependymoma (D) Meningioma
163. Which of the following is a round blue cell tumor
 (A) Osteosarcoma (B) Ewings sarcoma
 (C) Chondrosarcoma (D) Osteoblastoma
164. Treatment of Choice for High grade glioma
 (A) Surgery
 (B) Surgery followed by adjuvant RT
 (C) Surgery followed by adjuvant CT
 (D) Surgery followed by adjuvant RTCT followed by CT
165. Most common cancer Worldwide
 (A) Lung Cancer (B) Breast Cancer
 (C) Prostate Cancer (D) Brain Cancer
166. Risk of Malignancy in BIRADS category 4
 (A) < 5% (B) 0%
 (C) 2 - 50% (D) < 2%
167. All of the following pass through Internal auditory canal except
 (A) CN VIII (B) CN VII
 (C) CN VI (D) Labrythine artery
168. LITT (Laser Interstitial Thermal Therapy) used to treat
 (A) Brain Tumors (B) Bladder Tumors
 (C) Esophageal Tumors (D) Biliary Tumors
169. Bruton Kinase Inhibitor
 (A) Ibrutinib (B) Idarubicin
 (C) BCNU (D) CCNU
170. The p53 gene is located on the
 (A) Long arm of chromosome 13 (13q14) (B) Short arm of chromosome 13 (13q14)
 (C) Long arm of chromosome 15 (13q14) (D) Short arm of chromosome 17 (13q14)

171. Oncogene involved in the Carcinoma Stomach
 (A) MAP1 (B) LMP1
 (C) CDH1 (D) EBNA
172. Cranial to Caudal Radiological Boundary of the Level III lymphnode
 (A) Caudal edge of lateral process of C1 to Caudal edge of body of hyoid bone
 (B) Cranial edge of lateral process of C1 to Cranial edge of body of hyoid bone
 (C) Caudal edge of cricoid cartilage to cranial edge of body of Hyoid bone
 (D) Caudal edge of cricoid cartilage to caudal edge of body of Hyoid bone
173. Standard of Treatment for Stage II glottis Cancer
 (A) Definitive Chemotherapy (B) Definitive Radiotherapy
 (C) Chemoradiation (D) Surgery followed by Chemoradiation
174. According to “CROSS TRIAL” updated analysis median overall survival benefit in Carcinoma Esophagus patients was
 (A) 48 months in neoadjuvant arm versus 24 months with surgery alone
 (B) 72 months in neoadjuvant arm versus 24 months with surgery alone
 (C) 60 months in neoadjuvant arm versus 24 months with surgery alone
 (D) 36 months in neoadjuvant arm versus 24 months with surgery alone
175. Most common site of locoregional failure after resection of gastric cancer
 (A) Gastric Bed (B) Peritoneum
 (C) Lymphnodes (D) Operated wound
176. Feeder artery for LD Flap?
 (A) Thoracodorsal artery (B) Circumflex scapular artery
 (C) Suprascapular artery (D) Inferior pectoral artery
177. A patient comes to casualty with head injury and CT scan shows lentiform opacity with hyperdense lesions in it. What is the diagnosis of the patient ?
 (A) Chronic SDH (B) Acute on chronic SDH
 (C) EDH (D) Cerebral Contusion
178. Most common intra abdominal malignancy of infants is?
 (A) Wilms Tumor (B) Neuroblastoma
 (C) Mesoblastoma (D) Lymphoma
179. Gorlin syndrome caused by defect in chromosome number
 (A) 9 (B) 10
 (C) 11 (D) 12
180. MC site of Soft tissue sarcoma ?
 (A) Retroperitoneum (B) Extremities
 (C) Back (D) Chest

181. Which of the following structure is preserved in type III Neck dissection ?
 (A) Spinal accessory nerve (B) Sternocleidomastoid muscle
 (C) Internal jugular vein (D) All of the above
182. Which of the following is true about breast malignancy during pregnancy ?
 (A) Lobular carcinoma is the more common type during pregnancy
 (B) Chemotherapy is given in first trimester
 (C) MRM is usually performed during second trimester
 (D) Radiotherapy can be given in 3rd trimester
183. Which is the absolute contraindication for Breast Conservative Surgery ?
 (A) Multiple tumors involving more than one quadrant of the breasts
 (B) Vasculitis
 (C) Tumor size 3 cm
 (D) Axillary lymph nodes are enlarged
184. Insulinoma is situated in ?
 (A) Head of pancreas (B) Body of pancreas
 (C) Tail of pancreas (D) Equally distributed in head, body and tail
185. Most common symptom of Ca Esophagus ?
 (A) Weight loss (B) Dysphagia
 (C) Hematemesis (D) Ascitis
186. If a Gallbladder Malignancy is suspected preferred operation is ?
 (A) Laparoscopic cholecystectomy (B) Open Cholecystectomy
 (C) Partial Cholecystectomy (D) Any of the above
187. Cysterna Chyli is located at level of ?
 (A) L1 - L2 (B) L3 - L4
 (C) L4 - S1 (D) T11 - T12
188. Transplant rejection is initiated by?
 (A) HLA antigen (B) Rh antigen
 (C) ABO antigen (D) None of the above
189. Tumor marker of GIST
 (A) CD 117 (B) CD 133
 (C) CD 54 (D) CD 118
190. Most common presentation of peri ampullary carcinoma is?
 (A) Intermittant jaundice (B) Weight loss
 (C) Lump (D) Back pain

191. Drug interfering in VEGF pathway and is helpful in RCC treatment is ?
(A) Sorafenib (B) Sunitinib
(C) Bevacizumab (D) All of the above
192. Most common liver tumor is ?
(A) Hemangioma (B) Hepatic adenoma
(C) FNH (D) HCC
193. MAGIC Trial is about ?
(A) Adjuvant treatment (B) Perioperative chemotherapy
(C) Post operative radiotherapy (D) D2 lymphadenectomy
194. First echelon right testicular tumor
(A) Intercaval nodes (B) Paraaortic
(C) Paracaval nodes (D) Retrocaval nodes
195. Most common mutation seen in head and neck cancers
(A) EGFR (B) p53
(C) KRAS (D) CK7
196. Most common mutation seen in NSCLC
(A) EGFR (B) ALK
(C) KRAS (D) CK7
197. To define Solitary Pulmonary nodule, size should be
(A) < 1 cm (B) < 2 cm
(C) < 3 cm (D) < 4 cm
198. All are features of malignancy in lung cancer except
(A) Spiculated margins (B) Calcification
(C) Contrast enhancement (D) Low Suv
199. Drug of choice in EGFR sensitizing T790M mutation positive NSCLC
(A) Gefitinib (B) Osimertinib
(C) Pembrolizumab (D) Nivolumab
200. Most common cause of Gynaecological Cancer death
(A) Endometrial cancer (B) Ovarian Cancer
(C) Cervical cancer (D) Vaginal cancer