

पुस्तिका में पृष्ठों की संख्या : 24
Number of Pages in Booklet : 24

प्रश्न-पत्र पुस्तिका संख्या /

Question Paper Booklet No.

5203349

पुस्तिका में प्रश्नों की संख्या : 180
No. of Questions in Booklet : 180

SSAPNs-02

Paper Code : 28

SUBJECT : Neuro Surgery

परीक्षा दिनांक : 14/08/2020

समय : 3.00 घण्टे
Time : 3.00 Hours

परीक्षा समय : 9:00 To 12:00

अधिकतम अंक : 180
Maximum Marks : 180

प्रश्न-पत्र पुस्तिका एवं उत्तर पत्रक के पेपर सील/पॉलिथीन बैग को खोलने के बाद परीक्षार्थी प्रश्न-पत्र पुस्तिका संख्या को उत्तर पत्रक पर सावधानीपूर्वक अंकित करें। इसमें किसी भी प्रकार की त्रुटि होने पर जिम्मेदारी अभ्यर्थी की होगी।

The candidate fill the Question Paper Booklet No. on Answer Sheet carefully after opening the Paper Seal / Polythene bag. Candidate himself shall be responsible for any error.

परीक्षार्थियों के लिए निर्देश

1. सभी प्रश्नों के उत्तर दीजिए।
2. सभी प्रश्नों के अंक समान हैं।
3. प्रत्येक प्रश्न का केवल एक ही उत्तर दीजिए।
4. एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा।
5. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं, जिन्हें क्रमशः 1, 2, 3, 4 अंकित किया गया है। अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले अथवा बबल को उत्तर पत्रक पर नीले बॉल प्वाइंट पेन से गहरा करना है।
6. OMR उत्तर पत्रक इस परीक्षा पुस्तिका के अन्दर रखा है। जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर-पत्र निकाल कर ध्यान से केवल नीले बॉल पॉइंट पेन से विवरण भरें।
7. प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा। गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से है। किसी भी प्रश्न से संबंधित गोले या बबल को खाली छोड़ना गलत उत्तर नहीं माना जायेगा।
8. मोबाइल फोन अथवा इलेक्ट्रॉनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है। यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी।
9. कृपया अपना रोल नम्बर ओ.एम.आर. पत्रक पर सावधानीपूर्वक सही भरें। गलत अथवा अपूर्ण रोल नम्बर भरने पर 5 अंक कुल प्राप्तांकों में से काटे जा सकते हैं।

चेतावनी: अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनधिकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए विविध नियमों-प्रावधानों के तहत कार्यवाही की जाएगी। साथ ही विभाग ऐसे अभ्यर्थी को भविष्य में होने वाली विभाग की समस्त परीक्षाओं से विवर्जित कर सकता है।

INSTRUCTIONS FOR CANDIDATES

1. Answer all questions.
2. All questions carry equal marks.
3. Only one answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as 1, 2, 3, 4. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with blue ball point pen only.
7. 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. 5 Marks can be deducted for filling wrong or incomplete Roll Number.

Warning : If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

इस परीक्षा पुस्तिका को तब तक न खोलें जब तक कहा न जाए।

Do not open this Test Booklet until you are asked to do so.

28 - □



1. Loss of corneal reflex is seen in all except :

- (1) CP Angle tumour
- (2) Carotid aneurysm
- (3) Superior orbital fissure syndrome
- (4) Caudal 1/3 of spinal trigeminal tract lesion

2. Correct match is :

- (1) Downbeat nystagmus – Pineal tumour
- (2) See-Saw nystagmus – INO
- (3) Occular bobbing – Lesion in pontine tegmentum
- (4) Ataxic nystagmus – Suprasellar tumour

3. SIADH - which of the following is false ?

- (1) Urine $\text{Na}^+ > 25 \text{ meq/L}$
- (2) Serum $\text{Na}^+ > 135 \text{ meq/L}$
- (3) Serum osmolality $< 280 \text{ mosm/kg}$
- (4) Urine osmolality $>$ serum osmolality

4. Critical TBI, GCS score is :

- (1) GCS 9-13
- (2) GCS 5-8
- (3) GCS 3-4
- (4) None

5. Denver Grading Scale, used for :

- (1) Traumatic brain injury
- (2) Blunt cerebrovascular injury
- (3) Sub arachnoid hemorrhage
- (4) Carotid artery dissection

6. All of the following IV anaesthetics reduces ICP except :

- (1) Propofol
- (2) Ketamine
- (3) Etomidate
- (4) Barbiturate

7. Most sensitive method of detecting Venous Air Embolism is :

- (1) Transesophageal ECHO
- (2) End tidal CO_2
- (3) Precordial Doppler
- (4) Transcutaneous O_2

8. Length of Bayonet forcep used for brain surface suitably :

- (1) 8 cm
- (2) 9.5 cm
- (3) 11 cm
- (4) 10 cm

9. Smallest Penfield dissector (No. 4) has width of :

- (1) 1 mm
- (2) 2 mm
- (3) 3 mm
- (4) 4 mm



10. Beyond Dura in neurosurgical procedure most common size of suction tube used :
- (1) 7 F
 - (2) 9 F
 - (3) 3 F
 - (4) 11 F
11. Recommended suture size for MCA repair :
- (1) 6-0
 - (2) 7-0
 - (3) 8-0
 - (4) 9-0
12. Most common laser used in neurosurgery :
- (1) Helium-Neon
 - (2) CO₂
 - (3) Holmium
 - (4) Argon
13. Contraindications for Neuroendosurgery, all except :
- (1) Uncorrected bleeding disorder
 - (2) Poor renal function
 - (3) Connective tissue disorder
 - (4) Overweight
14. The stain (contrast) feature, "arrives early stays late" is a feature of :
- (1) GBM
 - (2) Medulloblastoma
 - (3) Lhermitte Duclos disease
 - (4) Meningioma
15. Following is used during WADA test :
- (1) Papaverine
 - (2) Abciximab
 - (3) Sodium Amytal
 - (4) Eptifibatide
16. Treatment of ruptured aneurysm during Coiling include all except :
- (1) Lowering of BP
 - (2) Deflation of balloon in balloon assisted coiling
 - (3) Injection of 500 mg Protamine
 - (4) Insertion of EVD
17. Drug of choice for Spasmolysis in cerebral vasospasm :
- (1) Verapamil
 - (2) Papaverine
 - (3) Nimodipine
 - (4) Sodium nitroprusside
18. Most common traumatic brain injury is :
- (1) Contusion
 - (2) EDH
 - (3) Concussion
 - (4) SDH



19. Regarding Central Herniation, Hyperventilation indicates which stage of herniation ?

- (1) Diencephalic
- (2) Mesencephalic
- (3) Pontine
- (4) Medullary

20. True about EDH, all except :

- (1) Crosses suture line
- (2) Hitch sutures helpful
- (3) Present between inner table & outer table
- (4) Operable volume > 30 ml

21. Best investigation for spinal instability is :

- (1) CT
- (2) MRI
- (3) Myelography
- (4) Dynamic X ray

22. Late post-traumatic seizures is :

- (1) After 24 hrs
- (2) After 7 days
- (3) After 72 hrs
- (4) After 14 days

23. True statement, all except :

- (1) Antiepileptics reduces incidence of early post-traumatic seizures
- (2) Antiepileptics reduces incidence of late post-traumatic seizures
- (3) Immediate post-traumatic seizures occurs within minutes/hours of trauma
- (4) Penetrating brain injury are high risk for post-traumatic seizures

24. "Classic " appearance of EDH on CT occurs in _____ of cases.

- (1) 84%
- (2) 90%
- (3) 70%
- (4) 88%

25. Poor prognosis in Gun shot injury associated with all except :

- (1) Bullet that crosses the midline
- (2) Bullet that traverse the ventricles
- (3) Suicide attempts
- (4) Bullet & bone chips in ipsilateral lobe

26. Growing skull fracture, true statements all except :

- (1) Also known as Post traumatic leptomeningeal cyst
- (2) Most common age > 3 yrs
- (3) Most often presents as scalp mass
- (4) Radiographic findings - progressive widening of # & scalloping of edges

27. Head injury is considered minor if loss of consciousness is present for :

- (1) < 2 minutes
- (2) < 15 minutes
- (3) < 5 minutes
- (4) < 1 minutes

28. Which fracture should not be elevated ?

- (1) Depressed # over dural sinuses
- (2) Compressed #
- (3) Ping pong #
- (4) Cosmetic deformity

29. SCIWORA is common in :

- (1) Children
- (2) Adult
- (3) Old age
- (4) Neonate

30. A patient presented after trauma with loss of sensation below hip joint & flaccid both lower limbs, which class of ASIA impairment scale he/she belongs to ?

- (1) A
- (2) B
- (3) C
- (4) D

31. Stable spine fracture are all except :

- (1) Hangman type 1
- (2) Odontoid type 3
- (3) Wedge compression #
- (4) Hangman type 2

32. Clay Shoveler's fracture :

- (1) Avulsion of spinous process, usually C7
- (2) Tip of odontoid #
- (3) Occipital condyle #
- (4) Anterior compartment # thoracic spine

33. Fracture line passing through region of sacral foramina (sparing central canal), classification grade :

- (1) Zone 1
- (2) Zone 2
- (3) Zone 3
- (4) Zone 4

34. TLICS (Thoracolumbar injury classification & severity score) include all except :

- (1) Radiographic compression #
- (2) Speed of impact
- (3) Root injury
- (4) Cauda equine syndrome

35. In Denis 3 column model of spine middle column defines :

- (1) Anterior half of disc & body
- (2) Posterior half of disc & body
- (3) Posterior arch
- (4) Portion between ALL & PLL



36. Trajectory for C2 pedicle screws :

- (1) Superiorly & medially
- (2) Superiorly & laterally
- (3) Inferiorly & laterally
- (4) Inferiorly & medially

37. In severe head injury with raised ICP, level of PaCO₂ in patients on ventilator support maintained at :

- (1) 30-35 mmHg
- (2) 25-30 mmHg
- (3) 35-40 mmHg
- (4) >40 mmHg

38. Most common vessel causing Trigeminal neuralgia :

- (1) SCA
- (2) AICA
- (3) PICA
- (4) BA

39. Treatment for Trigeminal neuralgia :

- (1) Carbamazepine
- (2) Sodium valproate
- (3) Tramadol
- (4) Etoricoxib

40. Diagnostic aids for CRPS aka Causalgia :

- (1) Thermography
- (2) 3 phase bone scan
- (3) Osteoporosis on X-ray
- (4) All

41. Most common complication following MVD for Vth neuralgia :

- (1) Deafness
- (2) Facial sensory loss
- (3) Post operative hemorrhage
- (4) CSF leak

42. SUNCT can be differentiated from Vth neuralgia :

- (1) Unilaterality
- (2) Stabbing shock like pain
- (3) Lacrimation & conjunctival injection from onset of symptoms
- (4) Long lasting attacks

43. MC complication of aneurysmal rupture :

- (1) Hydrocephalus
- (2) Rebleeding
- (3) Vasospasm
- (4) Hyponatremia

44. Cerebral angiography was performed by :

- (1) Sir Walter Dandy
- (2) George Moore
- (3) Seldinger
- (4) Egas Moiniz

45. SAH can be caused by rupture of all of following vessels except :

- (1) ACOM
- (2) PCOM
- (3) AICA
- (4) Post choroidal artery

46. Which of the following avoided in Intracranial venous thrombosis ?

- (1) Dehydration
- (2) Decongestents
- (3) Heparin
- (4) Antibiotics

47. Proximal internal carotid artery stenosis, best diagnosed by :

- (1) DSA
- (2) MR angiography
- (3) Colour Doppler
- (4) CT angiography

48. Most common site for peripheral aneurysm is :

- (1) Popliteal artery
- (2) Femoral artery
- (3) Posterior tibial
- (4) None

49. Which of the following vessel is in relation with Insular Cortex ?

- (1) MCA
- (2) PCA
- (3) PCOM
- (4) Anterior choroidal artery

50. Cerebral perfusion pressure is :

- (1) MAP + ICP
- (2) MAP - ICP
- (3) MAP - CVR
- (4) MAP + CVR

51. After aneurysm rupture, Vasospasm occurs most commonly after :

- (1) 21 days
- (2) 4-14 days
- (3) 21-28 days
- (4) 3wks - 3 months

52. Recurrent artery of Heubner is a branch of :

- (1) Anterior choroidal artery
- (2) ACA
- (3) ACOM
- (4) PCOM

53. SAH in lamina terminalis, location of aneurysm is :

- (1) MCA
- (2) ACOM
- (3) PCOM
- (4) Basilar apex



54. A patient with severe headache with cranial nerve deficit belongs to which Hunt & Hess grade ?
- (1) Grade 2
 - (2) Grade 1
 - (3) Grade 4
 - (4) Grade 5
55. Regarding ACOM aneurysm true statement all except :
- (1) Proximal control via ipsilateral A1 & contralateral A1
 - (2) Distal control via ipsilateral A2 & contralateral A2
 - (3) Remove A1 before A2
 - (4) For symmetric A1 used right sided approach
56. Payne's point location :
- (1) 3 cm up & 2.5 cm anterior to sphenoid ridge & 2.5 cm deep
 - (2) 2.5 cm up & 2.5 cm anterior to sphenoid ridge & 4.5 cm deep
 - (3) 4 cm up & anterior to sphenoid ridge
 - (4) 3 cm anterior & 3 cm superior to sphenoid ridge
57. Timing of surgery for Moya-Moya disease :
- (1) Immediate after recent symptomatic event
 - (2) After 2 weeks of recent symptomatic event
 - (3) After 2 months of recent symptomatic event
 - (4) After 6 months of recent symptomatic event
58. Spetzler Martin Scale is used for :
- (1) Aneurysm
 - (2) ICH
 - (3) AVM
 - (4) SAH
59. Most common Spinal AVM :
- (1) Type 2
 - (2) Type 3
 - (3) Type 1
 - (4) Type 4
60. Which type of Spinal AVM also known as AV fistulae ?
- (1) Type 1
 - (2) Type 2
 - (3) Type 3
 - (4) Type 4

61. "Triple H" therapy, H indicates all except :
- (1) Hypertension
 - (2) Hypervolemia
 - (3) Hypothermia
 - (4) Hemodilution
62. Modified FISCHER grade 2 is :
- (1) No IVH, focal /diffuse thin SAH
 - (2) Focal/ diffuse thick SAH, No IVH
 - (3) Focal / diffuse thin SAH with IVH
 - (4) Focal / diffuse thick SAH with IVH
63. In what ventricular structure is cerebrospinal fluid not produced by the choroid plexus ?
- (1) Roof of the fourth ventricle
 - (2) Floor of the third ventricle
 - (3) Lateral recess of the foramen of Luschka
 - (4) Temporal horn of the lateral ventricle
64. What deep cerebellar nucleus is located most laterally ?
- (1) Dentate
 - (2) Globose
 - (3) Fastigial
 - (4) Emboliform
65. What percentage of people have a balanced configuration of the circle of Willis ?
- (1) 5%
 - (2) 20%
 - (3) 40%
 - (4) 60%
66. What structure in the medial limbic circuit is the major output of the thalamus ?
- (1) Hippocampus
 - (2) Amygdala
 - (3) Fornix
 - (4) Cingulate gyrus
67. Damage to the anterior hypothalamus may cause what dysfunction ?
- (1) Obesity
 - (2) Cachexia
 - (3) Hypothermia
 - (4) Hyperthermia
68. Corpus striatum refers to what structures ?
- (1) Caudate and putamen
 - (2) Caudate, putamen and globus pallidus
 - (3) Putamen and globus pallidus
 - (4) Caudate and globus pallidus



69. What cistern contains the anterior choroidal artery, posterior cerebral artery, medial posterior choroidal artery, and basal vein of Rosenthal ?
- (1) Ambient
 - (2) Quadrigeminal
 - (3) Interpeduncular
 - (4) Crural
70. Where do climbing fibers originate ?
- (1) Vestibular nucleus
 - (2) Dentate nucleus
 - (3) Cerebellar glomeruli
 - (4) Inferior olivary nucleus
71. Which structure forms the roof of the temporal horn ?
- (1) Amygdala
 - (2) Hippocampus
 - (3) Tapetum
 - (4) Choroidal fissure
72. What is the arterial supply for the optic tract ?
- (1) Ophthalmic artery
 - (2) Anterior communicating, posterior communicating and posterior cerebral arteries
 - (3) Posterior communicating, posterior cerebral and anterior choroidal arteries
 - (4) Lateral posterior choroidal artery
73. Which tumor is associated with hydrocephalus and sudden death ?
- (1) Colloid cyst
 - (2) Glioblastoma multiforme
 - (3) Lymphoma
 - (4) Pilocytic astrocytoma
74. Multiple sclerosis is a contraindication to what procedural treatment for trigeminal neuralgia ?
- (1) Microvascular decompression
 - (2) Percutaneous radiofrequency rhizotomy
 - (3) Percutaneous glycerol injection into the Meckel cave
 - (4) Percutaneous balloon micro-compression
75. Deep brain stimulation in the setting of Parkinson disease is expected to result in brief minimal improvement to what characteristic of the disease ?
- (1) Dyskinesia
 - (2) Balance
 - (3) Tremors
 - (4) Rigidity
76. Injury to the subthalamic nucleus during a functional lesioning procedure classically produces what type of movement disorder ?
- (1) Myoclonus
 - (2) Hemiballism
 - (3) Pill-rolling tremor
 - (4) Chorea

77. What artery often is associated with hemifacial spasm ?

- (1) Posterior inferior cerebellar artery
- (2) Anterior inferior cerebellar artery
- (3) Superior cerebellar artery
- (4) Posterior cerebellar artery

78. What incomplete spinal cord injury syndrome is associated with a poor prognosis for recovery and dissociated sensory loss ?

- (1) Central cord syndrome
- (2) Anterior cord syndrome
- (3) Brown-Sequard syndrome
- (4) Posterior cord syndrome

79. Following resection of a low-grade oligodendroglioma, what is the next step in adjuvant therapy ?

- (1) Intravenous chemotherapy
- (2) Focused radiation
- (3) Whole brain radiation
- (4) Intrathecal chemotherapy

80. What tumor often arises from the "roof" of the fourth ventricle ?

- (1) Ependymoma
- (2) Juvenile pilocytic astrocytoma
- (3) Choroid plexus papilloma
- (4) Medulloblastoma

81. How does melanoma in the central nervous system respond to radiation ?

- (1) Melanoma is entirely radiation insensitive and should not be treated by radiation.
- (2) Melanoma is mostly radiation insensitive but radiation may be somewhat effective.
- (3) Melanoma is mostly radiation sensitive and radiation typically may be effective.
- (4) Melanoma is entirely radiation sensitive and should be treated primarily by radiation.

82. What is the primary disadvantage of approaching a pineal region tumor using an infratentorial supracerebellar approach ?

- (1) Difficulty may be encountered navigating around the deep venous system.
- (2) Morbidity may be associated with positioning.
- (3) Visual deficits are likely.
- (4) Seizures may be induced.

83. A 50-year-old woman presents to the hospital after a new onset of seizures. She describes headache and poor vision. Her family notes that her memory has been worsening, and she is becoming more confused. Neurologic exam reveals a loss of smell on the left side. Ophthalmologic exam reveals a pale left optic disk. The right optic disk is congested and edematous. What is her most likely diagnosis ?

- (1) Pituitary adenoma
- (2) Posterior reversible encephalopathy syndrome
- (3) Olfactory groove meningioma
- (4) Brainstem cavernoma



84. The most common deficit associated with a corpus callosotomy is :
- (1) Intracerebral hemorrhage
 - (2) Hyperthermia
 - (3) Memory problems
 - (4) Speech irregularities
85. In the adult patient, subdural effusions are associated with what entity ?
- (1) Chronic subdural hematomas
 - (2) Tuberculosis
 - (3) Syphilis
 - (4) Haemophilus influenzae meningitis
86. In the repair of peripheral nerve lesions with large gaps, the standard graft material is :
- (1) Autologous anterior interosseus nerve
 - (2) Autologous sural nerve
 - (3) Silicone
 - (4) Cadaveric nerve
87. What is a contraindication to performing an anterior lumbar interbody fusion ?
- (1) Unilateral pars defect
 - (2) Bilateral pars defect
 - (3) Grade 3 or 4 spondylolisthesis
 - (4) Severe loss of disk space height
88. What is the most common location for dural arteriovenous fistulae to drain ?
- (1) Superior sagittal sinus
 - (2) Junction of the transverse and sigmoid sinus
 - (3) Cavernous sinus
 - (4) Inferior petrosal sinus
89. How much of the superior sagittal sinus can be sacrificed without a high risk of inducing venous infarctions ?
- (1) Anterior two thirds
 - (2) No more than one third of any portion
 - (3) Anterior one third
 - (4) Entire sinus as long as the cortical bridging veins are left intact.
90. What two veins provide immediate contributions to the vein of Galen ?
- (1) Anterior septal and thalamostriate veins
 - (2) Inferior sagittal sinus and internal cerebral vein
 - (3) Superior sagittal and straight sinuses
 - (4) Basal vein of Rosenthal and internal cerebral Vein

91. What are Renshaw cells ?
- (1) Inhibitory interneurons found in the spinal cord that release GABA
 - (2) Inhibitory interneurons found in the spinal cord that release glycine
 - (3) Excitatory interneurons found in the spinal cord that release glutamate
 - (4) Excitatory interneurons found in the spinal cord that release acetylcholine
92. The most common intramedullary spinal cord tumor in children is :
- (1) Ependymoma
 - (2) Hemangioblastoma
 - (3) Astrocytoma
 - (4) Cavernoma
93. Most common cause of intractable temporal lobe seizure :
- (1) Uncinate seizure
 - (2) Mesial temporal seizure
 - (3) Idiopathic seizure
 - (4) GTC seizure
94. "Salaam seizure" usually associated with :
- (1) Petit mal epilepsy
 - (2) WEST Syndrome
 - (3) Tonic seizure
 - (4) Mesial temporal lobe sclerosis

95. Which seizure is said to be associated with HLA on chromosome 6 ?
- (1) Grand mal epilepsy
 - (2) Drop attacks
 - (3) Juvenile myoclonic epilepsy
 - (4) West syndrome
96. Which of the following is not a broad spectrum anticonvulsant ?
- (1) Levetiracetam
 - (2) Sodium Valproate
 - (3) Phenytoin
 - (4) Lamotrigine
97. Drug of choice for tonic/atonic seizure :
- (1) Lamotrigine
 - (2) Ethosuximide
 - (3) Benzodiazepines
 - (4) Valproate
98. Which anticonvulsant follow zero order kinetics ?
- (1) Phenytoin
 - (2) Valproate
 - (3) Carbamazepine
 - (4) Phenobarbital
99. SIADH like effect is seen in long term use of :
- (1) Valproate
 - (2) Phenobarbital
 - (3) Valproate
 - (4) Carbamazepine



100. Usual time period for clonazepam withdrawal :

- (1) 2-4 weeks
- (2) 3-6 weeks
- (3) 3-6 months
- (4) 6-8 weeks

101. Which of the following free antiepileptics drugs level increase during pregnancy ?

- (1) Carbamazepine
- (2) Phenobarbital
- (3) Phenytoin
- (4) Valproate

102. First line drug for status epilepticus :

- (1) valproate
- (2) lorazepam
- (3) levetiracetam
- (4) lamotrigine

103. Greatest conduction velocity among the following :

- (1) B fibres
- (2) C fibres
- (3) A beta
- (4) A alpha

104. False statement :

- (1) Muscle grade 0 means total paralysis.
- (2) Fasciculations are visible to naked eye.
- (3) Fibrillations are visible to naked eye.
- (4) Root value for ankle jerk is S1.

105. All of the following muscles supplied by posterior interosseous nerve except :

- (1) Extensor carpi ulnaris
- (2) Abductor pollicis longus
- (3) Extensor digitorum
- (4) Pronator quadratus

106. Nerve entrapped in Guyons canal :

- (1) Median
- (2) Ulnar
- (3) Radial
- (4) Musculocutaneous

107. Commonly used graft in peroneal nerve surgery :

- (1) Anterior tibial nerve
- (2) Superficial femoral cutaneous nerve
- (3) Sural nerve
- (4) Posterior tibial nerve

108. Most common site for pagets disease in spine :

- (1) Cervical
- (2) Lumbar
- (3) Thoracic
- (4) Sacral

109. "Bamboo spine" is a feature of :

- (1) Pagets disease
- (2) Ankylosing spondylitis
- (3) Scheuermann's kyphosis
- (4) OPLL

110. Nurick grade 3 in cervical spondylosis :

- (1) Myelopathy but able to walk
- (2) Slight difficulty in walk but able to work
- (3) Difficulty in walk but no need of assistance
- (4) Chairbound

111. For better outcome spinal epidural hematomas should be evacuated with in :

- (1) 4 hours
- (2) 6 hours
- (3) 2 hours
- (4) 8 hours

112. Smith Petersen osteotomy can increase lordosis upto _____ per level.

- (1) 10%
- (2) 5%
- (3) 15%
- (4) 20%

113. The most important laboratory test needed to diagnose bacterial meningitis :

- (1) Gram stain and aerobic culture
- (2) CBC with differential
- (3) EIA and PCR
- (4) MRI and CT head

114. The use of dexamethasone in meningitis has been questioned due to :

- (1) Steroid tendency to worsen inflammation
- (2) Possible decrease in drug penetration into CNS
- (3) Cost of steroid
- (4) Steroid effect on lipid profile

115. Tuberculous meningitis is often identified by :

- (1) Cellular bacterial gram stain
- (2) Negative protein purified derivative
- (3) Paralysis of 6th cranial nerve
- (4) Stress test



116. The most dangerous feature of an abscess is :

- (1) Sepsis
- (2) Loss of neurological function
- (3) Increased ICP
- (4) Development of meningitis

117. The most common cause of subdural empyema :

- (1) Open trauma
- (2) Meningitis
- (3) Osteomyelitis
- (4) Sinusitis

118. Most common site of Arachnoid cyst :

- (1) CP Angle
- (2) Cerebral convexity
- (3) Sylvian fissure
- (4) Vermis

119. True statement regarding treatment of arachnoid cyst are all except :

- (1) No treatment of cyst without mass effect
- (2) Ventricular drainage is effective & should be done routinely
- (3) MRI is better than CT in differentiating from neoplastic cyst
- (4) Low pressure shunt is preferred for shunting

120. Anterior fontanelle normally closes by _____ age.

- (1) 9 months
- (2) 18 months
- (3) 24 months
- (4) 30 months

121. Most common Craniosynostosis affecting single suture is :

- (1) Coronal
- (2) Saggital
- (3) Metopic
- (4) Lambdoid

122. Plagiocephaly is due to :

- (1) Sagittal synostosis
- (2) Unilateral coronal synostosis
- (3) Metopic synostosis
- (4) Bilateral coronal synostosis

123. Most common location of Encephalocele :

- (1) Frontal
- (2) Parietal
- (3) Occipital
- (4) Temporal

124. Risk of Myelomeningocele after one previous birth with MM is:

- (1) 1-2%
- (2) 2-3%
- (3) 6-8%
- (4) 4-5%

125. Surgical closure of myelomeningocele defect :

- (1) At birth only
- (2) Within 24 hrs
- (3) Within a week
- (4) Within 72 hrs

126. Not associated with Klippel feil syndrome :

- (1) Low posterior hair line
- (2) Brevicollis
- (3) Limited neck movements
- (4) Mental retardation

127. Most common sign & symptom associated with Tethered cord :

- (1) Sensory deficit
- (2) Bladder dysfunction
- (3) Scoliosis
- (4) Posterior spina bifida

128. Worst prognosis associated with :

- (1) Chiari 1
- (2) Chiari 2
- (3) Chiari 0
- (4) Chiari 3

129. True about Schizencephaly all except :

- (1) May be unilateral or bilateral
- (2) Absence of septum pallucidum in 80-90%
- (3) Communicate with ventricles
- (4) Lined by glial tissue / connective tissue

130. Sensitivity of prenatal USG to detect Spina bifida :

- (1) 90-95%
- (2) 80-85%
- (3) 70-75%
- (4) 50%

131. Treatment of Dandy Walker Malformation with aqueductal stenosis :

- (1) Posterior fossa decompression
- (2) Posterior fossa decompression with supratentorial ventricular shunting
- (3) Posterior fossa cyst shunting
- (4) None of the above



132. Most common cause of congenital hydrocephalus :

- (1) Chiari 1 malformation
- (2) Aqueductal stenosis
- (3) Traumatic SAH
- (4) Dandy walker malformation

133. Conditions associated with pseudohydrocephalus all except :

- (1) Hydranencephalus
- (2) Agenesis of corpus callosum
- (3) Alzheimer disease
- (4) 3rd ventricle colloid cyst

134. Complications of CSF shunting in NPH, all except :

- (1) Subdural hematoma
- (2) ICH
- (3) Seizure
- (4) Blindness

135. Torkildsen shunt is :

- (1) Ventricle to plueral space
- (2) Ventricle to atrial shunt
- (3) Ventricle to cisternal space
- (4) Ventricle to peritoneum

136. Risk of INTRAVENTRICULAR Haemorrhage in shunt insertion in absence of coagulopathy :

- (1) 2%
- (2) 4%
- (3) 8%
- (4) 10%

137. False statement about laproscopy surgery in patient with V-P shunt :

- (1) ICP monitoring during laproscopy
- (2) Absorption of CO₂ from peritoneum cause arterial dilatation and increase ICP
- (3) Insufflation pressure > 15 mmHg
- (4) Temporary externalization of shunt during surgery

138. Stereotactic radiosurgery is NOT used in :

- (1) small AVM
- (2) vestibular schwannoma
- (3) aqueductal stenosis
- (4) trigeminal neuralgia

139. Inventor of Gamma knife :

- (1) Lars Leksall
- (2) Walter Dandy
- (3) Harvey Cushing
- (4) Victor Horsley

140. What type of respiration will be seen if spinal cord is transected between pons & medulla ?

- (1) No effect
- (2) Apnoea
- (3) Irregular & gasping
- (4) Slow & deep

141. Structure which is perforated during third ventriculostomy :

- (1) Lamina terminalis
- (2) Septum in aqueduct
- (3) Premamillary membrane
- (4) None of the above

142. Best approach for cervical disc surgery :

- (1) Anterior
- (2) Posterior
- (3) Endoscopic
- (4) Lateral

143. Most Common surgical treatment for refractory seizure :

- (1) Corpus callosum resection
- (2) Anterior temporal lobe resection
- (3) Hemispherectomy
- (4) Selective amygdalo-hippocampectomy

144. Site of DBS(deep brain stimulation) for depression :

- (1) Thalamus
- (2) Caudate nucleus
- (3) Genu
- (4) Subgenual cingulate gyrus

145. Ashworth Score of a patient with spasticity having "slight increase in muscle tone & a catch with flexion or extension :

- (1) 1
- (2) 3
- (3) 2
- (4) 4

146. Ablative procedures for spasticity are all except :

- (1) Intrathecal baclofen
- (2) Phenol nerve block
- (3) Selective dorsal rhizotomy
- (4) Stereotactic thalamotomy



147. Treatment for torticollis are all except :

- (1) Trans epidermal neurostimulation to the neck
- (2) Local injection of botulinum toxin
- (3) Microvascular decompression of 9th CN
- (4) Sectioning of anastomotic branches between 11th CN & upper cervical posterior root

148. Most common etiology for Hemifascial spasm :

- (1) Idiopathic
- (2) Tumoural compression of nerve
- (3) Vascular compression syndrome
- (4) Bell's palsy

149. Upper extremity sympathectomy for hyperhidrosis :

- (1) Removal of T1-T4 ganglion
- (2) Removal of T2 ganglion only
- (3) Removal of T7 ganglion
- (4) None of the above

150. Brachiotherapy used in pituitary adenoma :

- (1) Yttrium 90
- (2) Iridium 192
- (3) Cesium
- (4) Cobalt

151. Dorsal root entry zone (DREZ)lesion useful in management of all except :

- (1) Spinal cord injuries
- (2) Post herpetic neuralgia
- (3) Phantom limb
- (4) Cancer pain

152. Duration of analgesia provided by Intraventricular Morphine in cancer patients :

- (1) 8 hours
- (2) 12 hours
- (3) 24 hours
- (4) 16 hours

153. True statement regarding Corpus callosotomy :

- (1) WADA test is not recommended in left handed individuals
- (2) Sparing anterior commissure prevent disconnection syndrome
- (3) Most effective in simple or complex seizure
- (4) MRI coronal section are ideal for assessing extent of division of corpus callosum

154. Outcome of seizure surgery - "modified Engel classification", class 3:

- (1) seizure free or residual areas
- (2) worthwhile seizure reduction
- (3) rare disabling seizures
- (4) no worthwhile seizure improvement

155. Maximum tolerance dose of radiation to brain is :

- (1) 60 Gy
- (2) 30 Gy
- (3) 15 Gy
- (4) 100 Gy

156. CNS tumour that melt away with radiation therapy but tends to recur later :

- (1) Lymphoma
- (2) Medulloblastoma
- (3) Germ cell tumour
- (4) Both (1) & (3)

157. Treatment for radiation necrosis include all except :

- (1) Excision if significant mass effect
- (2) Hyperbaric O₂
- (3) Stereotactic radiosurgery
- (4) Steroids

158. Following is used in Gamma knife radiosurgery :

- (1) Co-60
- (2) I-131
- (3) Proton
- (4) Th-201

159. Maximum recommended radiation dose for Thyroid :

- (1) 100 cGy
- (2) 10 cGy
- (3) 50 cGy
- (4) 20 cGy

160. General guidelines for considering SRS for brain metastasis are all except :

- (1) Total tumour number ≤ 10
- (2) Total tumour volume $\leq 15 \text{ cm}^3$
- (3) Single tumour volume $> 10 \text{ cm}^3$
- (4) No leptomeningeal disease present

161. Which of the following doesn't indicate seizure localization ?

- (1) Direct observation
- (2) Clinical examination
- (3) Intra-operative EEG
- (4) Cerebral imaging of epileptogenic foci

162. Seizure surgery is indicated in :

- (1) Seizures not responding to single drug
- (2) Bilateral foci
- (3) Epileptogenic foci in Broca's area
- (4) None of the above



163. Nobel prize awarded in psychosurgery
- (1) Irwing Cooper
 - (2) Egaz Moinz
 - (3) Charles Frazier
 - (4) Jacob Chandy
164. First department of neurosciences in India was setup in and at :
- (1) 1936, Chandigarh
 - (2) 1941, Chennai
 - (3) 1949, Vellore
 - (4) 1946, Kolkata
165. Neurosurgeon of Millennium is credited to :
- (1) Sir Victor Horsley
 - (2) M. Gazi Yasargil
 - (3) Harvey Cushing
 - (4) Von Recklinghausen
166. First removal of ruptured inter-vertebral disc was done by :
- (1) Mixter & Barr
 - (2) Victor Horsley
 - (3) Walter Dandy
 - (4) Harvey Cushing
167. First neurosurgeon to use operating microscope in humans :
- (1) M.G. Yasargil
 - (2) Karl Zeiss
 - (3) Theodore Kurze
 - (4) W. Mcewan
168. "Witzelsucht" or Pathological joking associated with lesion of :
- (1) Frontal lobe
 - (2) Temporal lobe
 - (3) Basal ganglia
 - (4) Corpus callosum
169. Frontal lobe cortical function assessment test is :
- (1) Clock face drawing
 - (2) Calcification
 - (3) Folding an envelope & apply seal
 - (4) Motor luria test
170. Prosapognosia is a function of :
- (1) Frontal lobe
 - (2) Temporal lobe
 - (3) Parietal lobe
 - (4) Occipital lobe
171. "See-Saw Nystagmus" seen in lesion of :
- (1) Upper midbrain
 - (2) Foramen magnum
 - (3) Suprasellar region
 - (4) Frontal eye field
172. Root value of Finger flexion reflex :
- (1) C6-T1
 - (2) C7-C8
 - (3) C5-T1
 - (4) C8-T1

173. In Somatosensory Evoked Potential (SEP) N13 lead corresponds to :

- (1) Root entry zone
- (2) Cervico medullary junction
- (3) Erb's point
- (4) Primary sensory cortex

174. "Dive Bomber" sound in EMG during which phase ?

- (1) Phase 1
- (2) Phase 3
- (3) Phase 2
- (4) Phase 4

175. Rule of Spence :

- (1) C1 lateral masses overhang C2 \geq 7 mm
- (2) C1 lateral masses overhangs C2 \geq 5 mm
- (3) C1 lateral masses overhangs C2 \geq 8 mm
- (4) C1 lateral masses overhangs C2 \geq 9 mm

176. Best sequence for detecting Acute SAH on MRI :

- (1) FSE (Fat Spin Echo)
- (2) FLAIR
- (3) STIR
- (4) DWI

177. In MRS (MR Spectroscopy) findings in case of Cerebral Abscess :

- (1) Increased lactate & increased NAA
- (2) Increased lactate & decreased NAA
- (3) Increased lactate & increased choline with decreased NAA
- (4) Decreased lactate & increased choline

178. Red colour in DTI images indicates :

- (1) Superior inferior tracts
- (2) Horizontal tracts
- (3) Anterior-posterior tracts
- (4) Short U fibres

179. Wernick's pupil seen in lesion of :

- (1) Optic nerve
- (2) Edinger Westphal nucleus
- (3) Anterior to LGB
- (4) Occipital cortex

180. Traube Hering Mayer waves represent :

- (1) Lundberg A wave
- (2) Lundberg B wave
- (3) Lundberg C wave
- (4) None of the above

रफ कार्य के लिए स्थान / SPACE FOR ROUGH WORK

