

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF GRADE-III OF MIZORAM HEALTH SERVICE (GDMO SUB-CADRE) UNDER HEALTH & FAMILY WELFARE DEPARTMENT, GOVERNMENT OF MIZORAM. OCTOBER, 2022

TECHNICAL SUBJECT PAPER - II

Time Allowed : 2 hours

Full Marks : 200

*All questions carry equal marks of 2 each.
Attempt all questions.*

1. Shock is clinically best assessed by:
 - (a) Urine output
 - (b) CVP
 - (c) BP
 - (d) Hydration
2. First line of therapy in shock in patients of trauma:
 - (a) Crystalloids
 - (b) Colloids
 - (c) Inotropes
 - (d) Blood transfusion
3. 22 Gauge IV canula colour is:
 - (a) Green
 - (b) Grey
 - (c) Blue
 - (d) Pink
4. FNAC needle size is:
 - (a) 18-22
 - (b) 22-26
 - (c) 27-29
 - (d) 16-18
5. Most common blood transfusion reaction is:
 - (a) Febrile non-hemolytic transfusion reaction
 - (b) Hemolysis
 - (c) Transmission of infections
 - (d) Electrolyte imbalance
6. Massive blood transfusion is defined as:
 - (a) Whole blood volume in 24 hours
 - (b) Half blood volume in 24 hours
 - (c) 40% blood volume in 24 hours
 - (d) 60% blood volume in 24 hours
7. Which of the following is a non-absorbable suture?
 - (a) Polypropylene
 - (b) Vicryl
 - (c) Catgut
 - (d) Polydioxanone
8. In elliptical incision, length to width ratio :
 - (a) 4:1
 - (b) 3:1
 - (c) 2:1
 - (d) 1:1
9. First step in trauma:
 - (a) Blood transfusion
 - (b) IV Fluids
 - (c) Reconstruction
 - (d) Maintenance of airways
10. In a school bus accident, which of the victim will you attend first?
 - (a) A child with airway obstruction
 - (b) A child with shock
 - (c) A child with flail chest
 - (d) A child with severe head injury

11. In triage green colour indicates
 - (a) Ambulatory patients
 - (b) Dead or moribund
 - (c) High priority treatment or transfer
 - (d) Medium priority or transfer
12. Organ most commonly damaged in penetrating injury of abdomen is:
 - (a) Liver
 - (b) Small intestine
 - (c) Large intestine
 - (d) Duodenum
13. Which of the following is used to define penetrating neck injury?
 - (a) 2cm depth of wound
 - (b) Injury to vital structures
 - (c) Breach of platysma
 - (d) Through and through wound
14. SDH is caused by injury of:
 - (a) Middle meningeal artery
 - (b) Cortical veins
 - (c) Superficial temporal artery
 - (d) NOTA
15. Most common organ involved in blunt injury to the abdomen:
 - (a) Spleen
 - (b) Liver
 - (c) Intestines
 - (d) Kidney
16. Best diagnostic test in stable patient with blunt trauma abdomen is:
 - (a) CECT abdomen
 - (b) MRI
 - (c) DPL
 - (d) FAST
17. A driver wearing seat belt applied brake suddenly to avoid accident. Most common organ injured in seat belt injury is:
 - (a) Liver
 - (b) Spleen
 - (c) Mesentery
 - (d) Abdominal aorta
18. Upper GI endoscopy and biopsy from lower esophagus in a 48 year old lady with chronic heart burn shows presence of columnar epithelium with goblet cells. The feature is most likely consistent with:
 - (a) Dysplasia
 - (b) Hyperplasia
 - (c) Carcinoma in situ
 - (d) Metaplasia
19. Which of the following is most common neoplasm of salivary gland?
 - (a) Pleomorphic adenoma
 - (b) Adenoid cystic carcinoma
 - (c) Mucoepidermoid carcinoma
 - (d) Mixed tumour
20. According to 'Rule of nine', burns involving perineum is:
 - (a) 1%
 - (b) 9%
 - (c) 18%
 - (d) 3%
21. A 5 years old child presents to Casualty with burns. The burn area corresponding to the size of his palm is equal to
 - (a) 1%
 - (b) 2%
 - (c) 3%
 - (d) 4%
22. Parkland formula is:
 - (a) % of burns x weight x 4 = volume in ml
 - (b) % of burns x weight/2 = volume in ml
 - (c) % of burns x weight x 9 = volume in ml
 - (d) 500 ml/m²BSA + 1500ml/m² = volume in ml
23. In burns management, which of the following is the fluid of choice?
 - (a) Dextrose 5%
 - (b) Normal Saline
 - (c) Ringer Lactate
 - (d) Isolyte-M

24. Ureteric colic due to stone is caused by:
- (a) Stretching of renal capsule due to back pressure
 - (b) Increased peristalsis of ureter to overcome the obstruction
 - (c) Irritation of intramural ureter
 - (d) Extravasation of urine
25. Thangliana was admitted with complains of ureteric stone. He developed radiating pain to the pubic area and medial aspect of thigh. What is the most probable site of lodgment of the stone?
- (a) At renal pelvis
 - (b) At pelvic brim
 - (c) At the level of gonadal vessels
 - (d) Intramural portion of the ureter
26. In BPH most common lobe involved is
- (a) Lateral
 - (b) Posterior
 - (c) Median
 - (d) Anterior
27. Most common site of development of carcinoma of prostate is:
- (a) Peripheral zone
 - (b) Central zone
 - (c) Transitional zone
 - (d) Fibromuscular stroma
28. Most common renal stone:
- (a) Calcium oxalate
 - (b) Uric acid stone
 - (c) Staghorn Calculi
 - (d) Cystine stone
29. H Pylori causes carcinoma by which mechanism?
- (a) Production of nitrosamines
 - (b) Gastric metaplasia
 - (c) Increasing acid secretion
 - (d) Causing mutation
30. Percentage of patients with perforated peptic ulcer who show free gas under the diaphragm:
- (a) 100%
 - (b) 80%
 - (c) 60%
 - (d) 90%
31. PPI's for peptic ulcer disease should be taken:
- (a) Before breakfast
 - (b) After lunch
 - (c) Before Lunch
 - (d) Bedtime
32. Light bulb sign is seen in:
- (a) Anterior shoulder dislocation
 - (b) Posterior shoulder dislocation
 - (c) Distal humerus fracture
 - (d) Proximal humerus fracture
33. A 75 yr old man taking NSAIDs for arthritis has an acute pain abdomen with guarding on examination. His vitals are stable after infusion of 1L RL. What should be the next step in the management?
- (a) CT abdomen
 - (b) Upper GI Endoscopy
 - (c) PPI, antibiotics
 - (d) Surgery immediately
34. The patient above is found to have a perforated duodenal ulcer. Which of the following best describes the required operation?
- (a) Suture closure of the perforation
 - (b) Omental patch of the perforation
 - (c) Repair of the perforation and truncal vagotomy
 - (d) Repair of the perforation and highly selective vagotomy
35. If the patient above were found to have a perforated Gastric ulcer instead of a duodenal ulcer, what additional steps need to be performed?
- (a) Feeding Jejunostomy
 - (b) Gastrojejunostomy
 - (c) Biopsy of the ulcer
 - (d) Pyloroplasty

36. The commonest site of epistaxis in the young is:
- (a) Little's area
 - (b) Bony septum
 - (c) Superior Turbinate
 - (d) Lateral wall of nose
37. Reactionary hemorrhage occurs:
- (a) After 24 hours
 - (b) After 48 hours
 - (c) Within 24 hours
 - (d) After 7 days
38. Ideal time for cleft lip repair surgery:
- (a) 3-6 weeks
 - (b) 6-12 weeks
 - (c) 1-1.5 years
 - (d) 3-4 years
39. True about cleft palate:
- (a) Surgery should be done at 1 year
 - (b) Associated with hearing loss
 - (c) Associated with cleft lip in 45%
 - (d) All of the above
40. A psychiatric patient who had undergone electro convulsive therapy presented with pain over the shoulder. The arm was held in internal rotation and could not be rotated back to the normal position. What is the possible diagnosis?
- (a) Rotator cuff injury
 - (b) Posterior dislocation of shoulder
 - (c) Anterior dislocation of shoulder
 - (d) Acromio-clavicular dislocation
41. Best time for surgery of undescended testis is:
- (a) Just after birth
 - (b) 6 months of age
 - (c) 12 months of age
 - (d) 24 months of age
42. Best investigation for acute intestinal obstruction is:
- (a) Barium studies
 - (b) X Ray
 - (c) USG
 - (d) ERCP
43. Commonest cause of acute intestinal obstruction is:
- (a) Adhesions
 - (b) Volvulus
 - (c) Inguinal Hernia
 - (d) Internal hernias
44. Pulled up caecum is seen in:
- (a) Ca Colon
 - (b) Carcinoid
 - (c) Ileocecal TB
 - (d) Crohn's disease
45. Typhoid perforation occurs during:
- (a) 1st week
 - (b) 2nd week
 - (c) 3rd week
 - (d) 4th week
46. In relation to congenital taclipes equinovarus (CTEV), which of the following statements are false?
- (a) It is more common in boys.
 - (b) Spina bifida is associated with CTEV.
 - (c) Deformity is characterised by hindfoot equinus or varus and forefoot abduction or supination.
 - (d) Pirani scoring system is used to assess the severity of CTEV and guide prognosis.
47. A 50-year-old woman sustains a displaced and angulated fracture through the diaphysis of the right humerus. Following four months of treatment with initially a U-slab and then a humeral brace, the patient has persistent pain and mobility at the fracture site and check radiographs demonstrate no cortex bridging and no callus. What is the most likely diagnosis?
- (a) Delayed union
 - (b) Atrophic non-union
 - (c) Hypertrophic non-union
 - (d) Infected non-union

48. Regarding diagnostic imaging, which of the following imaging modalities would be most appropriate for assessing an x-ray confirmed L1 fracture of the spine in a polytrauma patient?
- (a) CT (b) Ultrasound
(c) MRI (d) Bone scan
49. Which of the following statements regarding the treatment of fractures is false?
- (a) Not all fractures require reduction or stabilisation.
(b) Pain relief is a benefit of fracture treatment.
(c) Relative stability leads to primary bone healing.
(d) Absolute stability leads to primary bone healing
50. Which of the following statements are true?
- (a) Nasal polyps are a sign of cysticfibrosis in 10% of children with nasal polyps.
(b) Nasal polyps rarely present with nasal obstruction.
(c) Nasal polyps are characteristically painful when palpated with a probe.
(d) Oral steroids are never used in the treatment of simple nasal polyps.
51. Systematic supervision (examination and advice) of a woman during pregnancy is called –
- (a) Pre-conceptual Care (b) Ante-natal care
(c) Ante-Partum surveillance (d) Family Planning
52. Elderly Primi-gravida (as per FIGO) denotes a woman having her first pregnancy at the age of –
- (a) 30 and above (b) 32 and above
(c) 35 and above (d) 40 and above
53. The average weight gain during the second half of pregnancy is –
- (a) 1 kg a fortnight (b) 2 kg a fortnight
(c) 5 kg in a month (d) 1.5 kg in a month
54. The single most important measurement in fetal Ultrasonography which reflects fetal nutrition and growth restriction is –
- (a) Head circumference (b) Femur Length
(c) Abdominal circumference (d) Bi-parietal diameter
55. Pulmonary maturity in fetus is assessed by–
- (a) Doppler Ultrasonography (b) Fetal cardio-tocography
(c) Non-Stress test (d) Estimation of pulmonary Surfactant
56. Supplementary Iron therapy is needed for all pregnant mothers from-
- (a) 20 weeks onwards (b) 24 weeks
(c) 16 weeks onwards (d) From first trimester
57. The minimum spacing between the first birth and subsequent pregnancy in women should be –
- (a) 2 years (b) 4 years
(c) 1 year (d) 18 months
58. As per WHO recommendation in developing countries, the number of ante-natal check up/visit for a pregnant mother should be at least –
- (a) 3 (b) 4
(c) 2 (d) 6
59. Dangerous Placenta previa is the name given to –
- (a) Central or Complete Placenta previa (b) Type-I or Low-lying Placenta
(c) Type II Posterior Placenta Previa (d) All of the above

60. Bleeding per vagina is usually painless in –
- (a) Placenta previa
 - (b) Abruptio Placenta
 - (c) Inevitable abortion
 - (d) All of the above
61. Couvelaire Uterus is seen in –
- (a) Placenta Previa
 - (b) Uterine rupture
 - (c) Abruptio Placenta
 - (d) Vasa Previa
62. The following are features of Abruptio placenta except-
- (a) Painful vaginal bleeding, often associated with PIH, trauma etc.
 - (b) Character of blood is dark-coloured
 - (c) USG reveals placenta in lower segment
 - (d) Features of Pre-eclampsia may be present
63. Anemia in pregnancy is diagnosed when the Hemoglobin level is below-
- (a) 9 g/dl
 - (b) 12 g/dl
 - (c) 11 g/dl
 - (d) 10 g/dl
64. The most sensitive index of Iron deficiency Anemia is-
- (a) MCV
 - (b) MCHC
 - (c) PCV
 - (d) MCV
65. The following are absolute contra-indications of pregnancy due to high maternal mortality-
- (a) Primary Pulmonary Hypertension
 - (b) Eisenmenger's Syndrome
 - (c) Pulmonary Veno-occlusive disease
 - (d) All of the above
66. The following are complications of Diabetes in pregnancy except-
- (a) Miscarriage
 - (b) Intra-uterine Growth Restriction
 - (c) Infection
 - (d) Polyhydramnios
67. Immunoglobulin Injection is given to the mother soon after delivery in –
- (a) Hepatitis C infection
 - (b) Hepatitis B infection
 - (c) HIV infected mother
 - (d) All of the above
68. Oxytocic agent contra-indicated in pregnancy with Bronchial Asthma is –
- (a) Carbetocin
 - (b) Oxytocin
 - (c) Prostaglandin F-2-alpha
 - (d) Local PG-E1 and PG-E2
69. Mode of delivery and breast feeding to the new born in HIV infected mother is best determined by-
- (a) Period of gestation of fetus
 - (b) Co-infection with other STI and opportunistic infection
 - (c) Maternal CD-4 Count and Viral load
 - (d) None of the above
70. The commonest non-gynecological cause of acute abdomen requiring surgery during pregnancy is-
- (a) Bowel perforation
 - (b) Acute Appendicitis
 - (c) Renal Calculus
 - (d) Cholecystitis
71. The commonest type of female pelvis is –
- (a) Anthropoid
 - (b) Android
 - (c) Gynecoid
 - (d) Platypelloid
72. The ideal mode of delivery in Contracted pelvis is-
- (a) Caesarean section
 - (b) Instrumental delivery
 - (c) Trial of Labor
 - (d) McRobert's maneuver

73. The following are contra-indications for induction of labor except-
- (a) Contracted pelvis and cephalo-pelvic disproportion
 - (b) Malpresentation
 - (c) Previous classical cesarean section or myomectomy
 - (d) Pregnancy-induced hypertension
74. Bishop's Score indicates assessment of –
- (a) Fetal well-being and heart rate
 - (b) Intensity of uterine contraction
 - (c) Station of head as well as dilatation, effacement, consistency and position of Cervix
 - (d) All of the above
75. The following drugs are used for induction of labor except-
- (a) Dinoprostone (PGE₂)
 - (b) Oxytocin
 - (c) Methyl-ergometrine
 - (d) Mifepristone (RU 486)
76. Water intoxication is a potential complication of labor induction with-
- (a) Artificial Rupture of Membrane (ARM)
 - (b) Intra-uterine Foley catheter
 - (c) Prostaglandin E₁
 - (d) Oxytocin
77. Labor, whether spontaneous or induced, is best monitored by –
- (a) Cervicograph and fetal doppler
 - (b) Bishop's Score
 - (c) Partograph
 - (d) Cardiotocography
78. Normal duration of pregnancy is considered to be-
- (a) 280 days
 - (b) 37 weeks
 - (c) 365 days
 - (d) 9 months
79. Morning Sickness in first trimester of pregnancy is mainly due to –
- (a) Estrogen and progesterone
 - (b) b-Human Chorionic Gonadotrophin
 - (c) Follicle Stimulating Hormone and Luteinizing Hormone
 - (d) Prolactin
80. Confirmatory test/modality for intra-uterine pregnancy is-
- (a) Latex Agglutination test (Urine)
 - (b) ELISA
 - (c) Radio-immunoassay
 - (d) Ultrasonography
81. The perception of first active fetal movement by pregnant woman (feeling of life) in the second trimester is called-
- (a) Lightening
 - (b) External ballotement
 - (c) Quickening
 - (d) Fetal/Funic soufflé
82. Formula for calculation of Expected Date of Delivery (EDD) by adding 9 months and 7 days from the first day of last menstrual period is called-
- (a) Shephard's Formula
 - (b) Hadlock's formula
 - (c) Johnson's formula
 - (d) Naegele's formula
83. An operative procedure of extracting the products of conception before 28 weeks of pregnancy by cutting through anterior wall of uterus is called-
- (a) Dilatations and Curettage
 - (b) Cesarean section
 - (c) Hysterotomy
 - (d) Suction evacuation

84. Episiotomy is a surgical procedure done during-
- (a) 3rd stage of labor
 - (b) Latent phase labor
 - (c) 1st stage labor
 - (d) 2nd stage labor
85. Contra-indication of operative vaginal delivery (Forceps and Ventouse) are all except-
- (a) Inadequate pelvis
 - (b) Unengaged fetal head
 - (c) Fetus with bleeding diathesis (hemophilia)
 - (d) Inadequate expulsive force and maternal exhaustion
86. Common indications of primary Cesarean section are all except-
- (a) Failed induction and Non-progress labor
 - (b) Fetal distress
 - (c) Cephalo-pelvic disproportion
 - (d) Previous Cesarean delivery
87. '25 year old unmarried woman presents with recurrent pain which appears in the mid menstrual period and situated in the hypogastrium or to one iliac fossa'. The most probable diagnosis is-
- (a) Pre-menstrual Syndrome
 - (b) Pelvic Congestion syndrome
 - (c) Membranous Dysmenorrhea
 - (d) Mittelsmerz's syndrome
88. Menorrhagia is defined as-
- (a) Cyclic bleeding per vagina where the cycle is reduced to an arbitrary limit of 21 days or less
 - (b) Cyclic bleeding per vagina at normal intervals, with excessive amount or duration or both.
 - (c) Irregular, acyclic bleeding per vagina
 - (d) Menstrual bleeding occurring more than 35 days apart and which remains constant at that frequency
89. Investigations for Dysfunctional uterine bleeding includes-
- (a) Ultrasonography
 - (b) Dilatation and Curettage
 - (c) Hysteroscopy
 - (d) All of the above
90. The commonest benign ovarian epithelial tumour is-
- (a) Mucinous cyst adenoma
 - (b) Brenner Tumor
 - (c) Serous Cyst adenoma
 - (d) Endometrioid tumor
91. The commonest site of pelvic endometriosis is-
- (a) Pouch of Douglas
 - (b) Utero-sacral ligament
 - (c) Myometrium
 - (d) Ovary
92. Fully mature Graffian follicle of Ovary, just prior to ovulation measures about
- (a) 15 mm
 - (b) 20 mm
 - (c) 24 mm
 - (d) 18 mm
93. Complications of Pelvic Inflammatory disease include all except-
- (a) Pelvic peritonitis
 - (b) Ectopic pregnancy
 - (c) Infertility
 - (d) Endometriosis
94. Abortion is expulsion of an embryo or fetus weighing –
- (a) 1000 g or less
 - (b) 800g or less
 - (c) 500g or less
 - (d) 750g or less
95. Abortion associated with clinical evidences of infection of the uterus and its content is called-
- (a) Inevitable abortion
 - (b) Missed Abortion
 - (c) Septic Abortion
 - (d) Recurrent abortion

- 96.** Funneling or Y-shaped Cervix on Ultrasonography is seen in –
- (a) Chronic Cervicitis
 - (b) Cervical Incompetence
 - (c) Congenital elongation of Cervix
 - (d) Normal Multiparous cervix
- 97.** Commonest cause of spontaneous abortion is-
- (a) Endocrine and metabolic factor
 - (b) Genetic factors
 - (c) Anatomical abnormalities
 - (d) Immunological disorders
- 98.** Following are criteria of Polycystic Ovarian Syndrome except-
- (a) Oligo/Anovulation
 - (b) Hyper-androgenism
 - (c) Obesity
 - (d) Polycystic Ovary in Ultrasonography
- 99.** 17 year old girl presented with primary amenorrhea with cyclical lower abdominal pain and lump in the pelvis. The most probable diagnosis is-
- (a) Oligomenorrhoea
 - (b) Spasmodic Dysmenorrhea
 - (c) Ovarian tumor
 - (d) Cryptomenorrhoea
- 100.** The primary organisms involved in Pelvic Inflammatory Disease includes-
- (a) Neisseria gonorrhoea
 - (b) Chlamydia trachomatis
 - (c) Mycoplasma hominis
 - (d) All of the above

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