



JEPAS(PG)-2020

Subject: M. Sc. in Critical Care Science (M. Sc CCS)-2020

Duration: 90 minutes

Full Marks: 100

Instructions

1. All questions are of objective type having four answer options for each. Only one option is correct. Correct answer will carry full marks 1. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
2. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D.
3. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
4. Mark the answers only in the space provided. Do not make any stray mark on the OMR.
5. Write your roll number carefully in the specified locations of the **OMR**. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination centre and put your full signature in appropriate boxes in the OMR.
7. The OMR is liable to become invalid if there is any mistake in filling the correct bubbles for roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination centre. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
8. Candidates are not allowed to carry any written or printed material, calculator, docu-pen, log table, wristwatch, any communication device like mobile phones etc. inside the examination hall. Any candidate found with such items will be **reported against** & his/her candidature will be summarily cancelled.
9. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
10. Hand over the OMR to the invigilator before leaving the Examination Hall.



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- 1) laparoscopic cholecystectomy done in which position of table
- Supine
 - Lithotomy
 - Trendelenburg
 - Reverse Trendelenburg
- 2) All of the following are displayed in multiparameter monitor except
- SpO₂
 - ECG
 - EtCO₂
 - ventilator graphics
- 3) Maintenance dose of inj. dexmedetomidine for ICU sedation:
- 0.1 to 0.2 µg / Kg/hr.
 - 0.2 to 0.7 µg / Kg/hr.
 - 0.7 to 0.9 µg / Kg/hr.
 - 0.9 to 1.5 µg / Kg/hr.
- 4) Which of the following are not NSAIDs?
- Paracetamol
 - Diclofenac
 - Aceclofenac
 - Fentanyl
- 5) Somatostatin is secreted from =
- alpha cell.
 - beta cell.
 - gamma cell.
 - delta cell.
- 6) All of the following are fat soluble vitamins except:
- A.
 - D.
 - B.
 - E.
- 7) In Chronic renal failure patient which fluid is avoided:
- NS.
 - RL.
 - DNS.
 - Hydroxy Ethyl Starch.
- 8) Which one is true for Inspiratory reserve capacity:
- Tidal volume + Inspiratory reserve volume.
 - Tidal volume + expiratory reserve volume.
 - Tidal volume + Vital capacity.
 - Tidal volume + Functional reserve volume.
- 9) Which of the following are not viscoelastic coagulation tests?
- TEG.
 - ROTEM.
 - Sonoclot.
 - PT, INR.
- 10) Iron deficiency anemia is caused by:
- Roundworm.
 - Hookworm.
 - Tapeworm.
 - Threadworm.

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11) Sharp medical waste discarded in:

- a) Black bag.
- b) white box.
- c) Yellow box.
- d) Red bag.

12) All of the following are displayed in five channel multiparameter monitor except :

- a) SpO₂.
- b) ECG.
- c) EtCO₂.
- d) ventilator graphics.

13) Which of the following are not viscoelastic coagulation test?

- a) TEG
- b) ROTEM
- c) Sonoclot
- d) PT, INR

14) Which of the following are antiarrhythmic drug?

- a) cocaine.
- b) bupivacain.
- c) Lignocain.
- d) Ropivacain.

15) fluid of choice in head injury patients

- a) RL
- b) NS
- c) DNS
- d) HES

16) Energy used in ACLS protocol in DC shock(biphasic):

- a) 150 J.
- b) 200 J.
- c) 250 J.
- d) 300 J.

17) Which of the following are not feature of 2nd generation Supraglottic Airway Device:

- a) Integral bite block.
- b) Side channel for gastric suction.
- c) Airway only tube.
- d) Higher cuff seal pressure.

18) Drug of choice in anaphylactic shock:

- a) Dopamine.
- b) Dobutamine.
- c) Adrenalin.
- d) Noradrenalin.

19) Which of the following are not NSAID?

- a) Paracetamol.
- b) Diclofenac.
- c) Aceclofenac.
- d) Fentanyl.

20) Each gram of haemoglobin can transport how much oxygen/100 ml of blood?

- a) 1.39ml.
- b) 1.49ml.
- c) 2.39ml.
- d) 2.49ml.

21) Feature of cuff of silicon ET tube:

- a) High pressure, low volume.
- b) Low pressure, High Volume.
- c) Low Pressure, LOW volume.
- d) High Pressure High Volume.

22) life span of RBC=

- a) 110 days.
- b) 130 days.
- c) 120 days.
- d) 140 days.

23) Which of the following is causative organism of Hydatid cyst:

- a) Diplococcus.
- b) Meningococcus.
- c) Echinococcus.
- d) Streptococcus.

24) Saturday night palsy causes due to injury in:

- a) Radial Nerve.
- b) Ulnar nerve.
- c) Axillary Nerve.
- d) Radial Nerve.

25) Sympathetic stimulation in eye causes=

- a) Constriction of pupil.
- b) Dilatation of pupil.
- c) Both of the above.
- d) None.

26) Energy used in ACLS protocol in DC shock(biphasic)

- a) 150 J
- b) 200 J
- c) 250 J
- d) 300 J

27) % of CO₂ in Air

- a) 3%
- b) 0.3%
- c) 0.03%
- d) 0.2%

28) Normal pH of Blood:

- a) 7.25-7.35.
- b) 7.35-7.45.
- c) 7.45-7.55.
- d) 7.15-7.25.

29) Insulin release from which type of cells:

- a) Alkalosis.
- b) Hyperthermia.
- c) Acidosis.
- d) Decreased 2,3,DPG.

30) All of the following are IV induction agent except:

- a) Propofol.
- b) Ketamine.
- c) Dexmedetomidine.
- d) Etomidate.

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31) Covid 19 virus is a _____ virus:

- a) DNA.
- b) RNA.
- c) Both.
- d) None.

32) Which one of the following is pure motor nerve:

- a) Optic.
- b) Facial.
- c) Olfactory.
- d) Oculomotor.

33) Coconut water is contraindicated in:

- a) Chronic renal failure.
- b) Chronic heart failure.
- c) Chronic obstructive pulmonary disease.
- d) none.

34) which of the following are antiarrhythmic drug?

- a) cocaine
- b) bupivacain
- c) Lignocain
- d) Ropivacain

35) Ether day celebrated every year:

- a) 16 Jul.
- b) 16 Sep.
- c) 16 Oct.
- d) 16 Nov.

36) boyales apparatus invented in the year of

- a) 1917
- b) 1918
- c) 1919
- d) 1920

37) All of the following are trace element except:

- a) Calcium.
- b) Zinc.
- c) Selenium.
- d) Molybdenum.

38) modified johns criteria used to diagnose which disease?

- a) pulomnary hypertension
- b) Ischaemic heart disease
- c) Rhumatic herat disease
- d) Pulmonary embolism

39) laparoscopic cholecystectomy done in which possition of table:

- a) Supine.
- b) Lithotomy.
- c) Trendelenburg.
- d) Reverse Trendelenburg.

40) % of CO₂ in Air:

- a) 3%.
- b) 0.30%
- c) 0.03%
- d) 0.20%

- 41) Automated NIBP measurement uses which principle?
a) palpatory
b) Auscultatory
c) Oscillatory
d) none
- 42) Drug of choice in anaphylactic shock
a) Dopamine
b) Dobutamine
c) Adrenalin
d) Noradrenalin
- 43) All of the following are anti TB drug except:
a) Rifampicin.
b) Isoniazid.
c) Streptomycin.
d) Gentamycin.
- 44) Which of the following drug is not used in Advance cardiac lifesupport(ACLS):
a) Amiodaron.
b) Milrinone.
c) Adenosine.
d) Adrenaline.
- 45) 2L of oxygen flow with nasal prongs provides _____much FiO₂:
a) 0.3.
b) 0.24.
c) 0.4.
d) 0.5.
- 46) Full nitrous oxide cylinder having ----- pressure:
a) 770psig.
b) 790psig.
c) 750psig.
d) 710psig.
- 47) Malaria transmits by which of the following vector:
a) Aedes.
b) Culex.
c) Anopheles.
d) Sandfly.
- 48) Fasting for adults(Solid food) for elective surgery:
a) 4hr.
b) 6hr.
c) 8hr.
d) 10hr.
- 49) All of the following are anti TB drug except
a) Rifampicin
b) Isoniazid
c) Streptomycin
d) Gentamycin
- 50) Pin index system of oxygen=
a) 3,5.
b) 2,5.
c) 1,5.
d) 4,5.

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51) potassium present in Ringers lactate

- a) 2meq/L
- b) 3meq/L
- c) 4meq/L
- d) 5Meq/L

52) All of the following are bacillus except:

- a) Clostridium tetani.
- b) Mycobacterium tuberculosis.
- c) Nisseria gonorrhoea.
- d) H.pylori.

53) Boyles apparatus invented in the year of:

- a) 1917.
- b) 1918.
- c) 1919.
- d) 1920.

54) During 2nd worldwar which is used as potassium supplement?

- a) coconut water.
- b) mixed fruit juice.
- c) orange juice.
- d) sea water.

55) Red rubber ET tube cuff is:

- a) High pressure, low volume.
- b) Low pressure, high volume.
- c) Low Pressure, LOWvolume.
- d) High Pressure HighVolume.

56) Proseal LMA is which type of SGA?

- a) 1st generation.
- b) 2nd generation.
- c) 3rd generation.
- d) 4th generation.

57) Pipeline(central) oxygen pressure=

- a) 40-45 psig.
- b) 50-55 psig.
- c) 60-65 psig.
- d) 70-75 psig.

58) Fluid of choice in head injury patients:

- a) RL.
- b) NS.
- c) DNS.
- d) HES.

59) fluid of choice in Diabetic ketoacidosis

- a) NS
- b) RL
- c) ALBUMIN
- d) HES

60) Potassium present in Ringers lactate:

- a) 2meq/L.
- b) 3meq/L.
- c) 4meq/L.
- d) 5meq/L.

61) Functional Residual Capacity(FRC)=

- a) IRV+ERV+RV.
- b) ERV+IRV.
- c) RV+IRV.
- d) RV+ERV.

62) Colour coding of nitrous oxide cylinder:

- a) Black.
- b) Blue.
- c) White.
- d) Orange.

63) Loading dose of Dexmedetomidine IV infusion:

- a) 2µg/kg over 20 min.
- b) 3µg/kg over 20 min.
- c) 1µg/kg over 10 min.
- d) 3µg/kg over 10 min.

64) Tachycardia in adult patients defined as heart rate=

- a) >100bpm.
- b) >150bpm.
- c) >110bpm.
- d) >200bpm.

65) Median nerve is which branch of brachial plexus:

- a) Lateral cord.
- b) Medial cord.
- c) Posterior cord.
- d) Both Lateral and medial cord.

66) Which of the following are not end product of oxidation of fatty acid:

- a) Acetone.
- b) Acetyl-CoA.
- c) Acetoacetic Acid.
- d) Beta Hydroxybutyric Acid.

67) All of the following are nondepolarising muscle Relaxants except:

- a) Vecuronium.
- b) Atracurium.
- c) Suxamethonium.
- d) Pancuronium.

68) covid 19 virus is a _____ virus

- a) DNA
- b) RNA
- c) both
- d) none

69) Proseal LMA is which type of SGA?

- a) 1st generation
- b) 2nd Generation
- c) 3rd Generation
- d) 4th Generation

70) Audible range of sound:

- a) 20-200 Hz.
- b) 20-2000 Hz.
- c) 20-20000 Hz.
- d) None.

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71) HME filtre is:

- a) Active Humidifier.
- b) Passive Humidifier.
- c) Active on Passive Humidifier.
- d) None.

72) Which of the following are bile salts:

- a) Na taurocolate.
- b) Na glycocholate.
- c) Both of the above.
- d) none.

73) all of the following are fat soluble vitamins except

- a) A
- b) D
- c) B
- d) E

74) All of the following are opioids except:

- a) Fentanyl.
- b) Morphine.
- c) Pentazocin.
- d) Diclofenac.

75) Life span of platelets:

- a) 6 days.
- b) 7 days.
- c) 8 days.
- d) 10 days.

76) Igel is which type of SAD:

- a) 1st generation.
- b) 2nd generation.
- c) 3rd generation.
- d) 4th generation.

77) Which of the following are newer mode of ventilator:

- a) A/CMV.
- b) CMV.
- c) PSV.
- d) NAMV.

78) Fluid of choice in Diabetic ketoacidosis:

- a) NS.
- b) RL.
- c) ALBUMIN.
- d) HES.

79) Waveform of ETCO₂ is known as:

- a) Capnograph.
- b) Capnogram.
- c) Capnometry.
- d) All of the above.

80) Glucagon release from:

- a) α - cells.
- b) β - cells.
- c) μ -cells.
- d) Delta cells.

81) Automated NIBP measurement uses which principle?

- a) Palpatory.
- b) Auscultatory.
- c) Oscillatory.
- d) none.

82) Insulin release from which type of cells:

- a) Liver.
- b) α - cells.
- c) β - cells.
- d) μ -cells.

83) Modified Johns criteria used to diagnose which disease?

- a) pulmonary hypertension.
- b) Ischaemic heart disease.
- c) Rheumatic heart disease.
- d) Pulmonary embolism.

84) Which one is true for LMA:

- a) This is a supraglottic airway.
- b) This is a subglottic airway.
- c) This is an infraglottic airway.
- d) Endotracheal.

85) All of the following are bacillus except

- a) Clostridium tetani
- b) Mycobacterium tuberculosis
- c) Nisseria gonorrhoea
- d) H. pylori

86) Which one of the following are not preferred site of arterial cannulation:

- a) Femoral Artery.
- b) Radial artery.
- c) Arterial dorsalis pedis artery.
- d) Arcuate artery.

87) Root value of thoracodorsal nerve=

- a) C6, C7, C8.
- b) C5, C6, C7.
- c) C8, T1, T2.
- d) C4, C5, C6.

88) Colour coding of nitrous oxide cylinder

- a) black
- b) blue
- c) white
- d) orange

89) pipeline(central) oxygen pressure=

- a) 40-45 psig
- b) 50-55 psig
- c) 60-65psig
- d) 70-75psig

90) Which of the following cranial nerves having parasympathetic activity?

- a) glossopharyngeal.
- b) facial.
- c) hypoglossal.
- d) vagus.

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91) Correct steps of BLS sequence:

- a) Call for Help, CHECK response, Check pulse.
- b) Check response, Call for help, Check pulse.
- c) Check Pulse, Call for help, Check response.
- d) none.

92) Ether day celebrated every year

- a) 16-07-2021
- b) 16-09-2021
- c) 16-10-2021
- d) 16-11-2021

93) All are water born disease except:

- a) Cholera.
- b) Hepatitis A.
- c) Hepatitis B.
- d) Amoebiasis.

94) Axillary nerve is the branch of=

- a) lateral chord of brachial plexus.
- b) Medial chord of brachial plexus.
- c) Posterior chord of brachial plexus.
- d) None.

95) Sharp medical waste discarded in

- a) Black bag
- b) white box
- c) Yellow box
- d) Red bag

96) Daily Requirement of protein:

- a) 0.6gm/kg.
- b) 0.7gm/kg.
- c) 0.8gm/kg.
- d) 0.9gm/kg.

97) Root value of suprascapular nerve:

- a) C3.
- b) C3, C4.
- c) C5, C6.
- d) C7.

98) Which one is not a preferred site of central venous cannulation:

- a) Subclavian vein.
- b) Internal jugular vein.
- c) Great saphenous vein.
- d) Femoral vein.

99) Fasting for adults(Solid food) for elective surgery

- a) 4hr
- b) 6hr
- c) 8hr
- d) 10hr

100) Pin index system of oxygen=

- a) 3,5
- b) 2,5
- c) 1,5
- d) 4,5