Discuss the following :

1)**Pulmonary embolism .**

2)Perioperative hyponatremia.

Write short account on the followings :

3)Febrile neutropenia.

4)Tumor-lysis syndrome

5)Barriers for effective pain contol .

6)Management of dirrhea in cancer patients.

7)Emesis and antiemetic drugs in patients receiving chemotherapy .

8)Cardiac and pulmonary toxicity of chemotherapy .

9)Hormonal treatment in cancer .

10)comment on venous access

11)Biopsy in diagnosis of tumors

Answer the following questions

12)Illustrate the order neurons of pain pathway from the right side of the face

13)Describe the boundaries and contents of the carotid triangle

14)State the differences between the right and left bronchi and lungs

15)Describ the anatomical features of the spinal meninges and their related spaces

Answer the following items :

16)Morphine :mechanism of action , therapeutic uses ,and advers effects .

17)Neuromuscular Blockers : types, mechanism of action and advers effects.

Write short nots of the following:

18)Types of the flow and differences between them

19)How does an oximeter (pulse oximeter)

20)Humidification of inspired gas

21)low flow and closed system

22)Discuss transport of carbon dioxide in the blood, carbon dioxide dissociation curve and Haldan effect

23)Discuss pathophysiological changes in different stages of shock

24)Definition and causes of acute lung injury (ALI) and acute respiratory distress syndrome (ARDS)

25)Immunonutrition in cancer and critically ill patient

26)Basic life support

Write short account on the followings :

27)Fungaemia in cacer patients

28)Chemotherapy induced metabolic emergencies in cancer patients

29)Barriers for effective pain control

30)Management of convulsions in cancer patients

31)discuss pathophy and management of septic

32)Febrile neut ropenia

33)Tumor-lysis syndrome

34)Barriers for effective pain control

35)Management of diarrhea in cancer patients

36)Write short notes on Mapelson , s breathing systems and there modification

37)Capnography:

***Definition and principle**

*** Normal Capnographic pattern**

*** Types of capnography**

38)How to increase surface area of vaporizers

39)Pulse oximetry:

***value**

40)Principles of Bourdon gauge and its uses

Write short account on the followings :

41) Febrile neutropenia

42)Tumor-lysis syndrome

43)Barriers for effective pain control

44)Management of diarrhea in cancer patients

Answer the following questions :

45)Describe the pain pathway from the foot to the cerebrum.State methods of control of intractable pain from the lower limb.

46) Describe the gross anatomical features , blood supply and innervation of the nasopharynx.

***Discuss:**

47)Mechanism of post- operative , pain and its managemenent.

Answer the following questions :

48)Diagnoses and treatment of pulmonary embolism.

49)Causes and treatment of :

A-Hyponatremia

B-Hypocalcmia

50)A two years old child submitted for removal of suprarenal tumor :

- How to assess postoperative pain of this child

- What are the adverse effect of post operative pain

- How to relieve postoperative pain

51)Mention the definition and aims of palliatve care

Write short nots of the following:

52)What are the steps of basic life support?

53)Immunonutrition in cancer and critically ill patient

54)Diagnoses and treatment of pulmonary embolism

55)Discuss the pathophysiology and management of pulmonary embolism ?

Discuss the following :

56)Adverse effects of post operative pain

57)multimodal analgesia

58)Etiology and pathophysiology of acute lung injury and acute respiratory distress syndrome

59)Cardiopulmonary resuscitation

Discuss the following :

60) (a) Pain as " the fifth vital sign"

(b) Properties of ideal measurement of pain

61) (a) Application of gas laws to pulmonary physiology

(b) Humidificatiln of inspired gas

62)Type I methods for measurement of pain

63)Types of flow and the differences between them

64)define only the fllowing :

a- Humidity

b- Differences between temperature and heat

c- Tranceducer

Discuss the following :

65) Neurohomonal systems in the human brain .

66) Non progressive stage of shock .

67) Regulatory effect of CO2on respiration.

68) Give short account on the rationale and principles of palliative chemotherapy

69) Give short account about cardiac& pulmonary toxicity of chemotherapy

70) Discuss barriers for effective pain control

71) Give an account about management of diarrhea in cancer patients

72) Describe the pain pathway from the foot to cerebrum . state methods of control of intractable pain from the lower limb .

28) Describe the gross anatomical features, blood supply and innervation of the nasopharynx .