Community Medicine

MCQs

SHMDC Q Bank

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1. To impart health education regarding child care to large number of mothers visiting MCH centre it is decided to resort to method of group discussions. What could be appropriate strength of each group for this purpose?
   a. 3-5
   b. 4-6
   c. 6-12
   d. 20-25
   e. 20-30

Key: True: c

2. To develop effective AIDS control strategy for Pakistan, the experts from all over the world are invited to devise the plan after relevant discussion. What name is given to this method?
   a. Seminar
   b. Group discussion
   c. Symposium
   d. Panel discussion
   e. Workshop

Key: True: d

3. Persuasive communication was deliberately employed to manipulate feelings, attitudes and beliefs of people regarding smoking, this method is known as:
   a. Counseling
   b. Motivation
   c. Propaganda
   d. Advising
   e. Education

Key: True: c

4. Health education is the responsibility of
   a. Health educationalist
   b. Doctor
   c. Paramedical staff
   d. Every health worker
   e. Community Nurse

Key: True: d

5. Diarrhoeal cases among children of an urban slum are on a rise. Almost all the mothers are illiterate and belong to lower socioeconomic class. It seems difficult to make them understand the use of ORS. What method can provide the best solution in this scenario?
   a. Role playing
   b. Poster competition
   c. Radio Programme
   d. Lectures
   e. T.V commercials **Key: True: a**

6. There was a tableau held in POF Hospital, Wah Cantt on the world children's day to demonstrate the importance of ORS in dehydration with a back drop of ORS, breast feeding and MCH service. This method is known as:

a. Poster competition
b. Role playing
c. Symposium
d. Lectures
e. Learning by doing **Key: True: b**

7. After a thorough study of socio-demographic characteristics of a population in Dhok Ratta, a relevant method of health education against smoking was employed to this population. Upon assessing the population habits even after lapse of 2 years, no change in the behaviour of the smokers was noted. What is likely to be missing in this programme to achieve the desired results?

a. Reinforcement
b. Knowledge of cultures
c. Knowledge of beliefs
d. Required devotion
e. Appropriate methods **Key: True: a**

8. In Pakistan about 50% population is illiterate and smoking is mostly prevalent among the poor. Government has started giving pictorial warnings instead of written, to have a greater impact of health education on people: This strategy is more focused on:

a. Message
b. Receiver
c. Sender
d. Channel
e. Planning Key: b

1. A pregnant woman presented with pallor, shortness of breath, lethargy and palpitation. Her blood examination revealed hemoglobin level of 9 gm/dl.
In your opinion what could be the probable deficiency in the woman?

a. Iron
b. Niacin
c. Vitamin C
d. Iodine
e. Globin Key: a

2. A 30 years old pregnant lady, gravidity 2 parity 1, visited the antenatal clinic at 32 weeks of gestation. She was a known smoker. On physical examination blood pressure was found to be 120/80 mm Hg. Blood examination showed Hb level of 12.5 g/dl. Ultrasound was suggestive of intrauterine growth retardation. Which factor during pregnancy would have contributed to intrauterine growth retardation?

a. Age
b. Parity
c. Anemia
d. Hypertension
e. Smoking Key: e

3. A 28 years old pregnant lady, gravidity 1 parity1, visited the antenatal clinic at 32 weeks of gestation. She was a known alcoholic. On physical examination blood pressure was found to be120/80 mm Hg. Blood examination showed Hb level of 12.5 g/dl. Ultrasound was suggestive of intrauterine growth retardation, Microcephaly and developmental delay. Which factor during pregnancy would have contributed to the fetal conditions?

a. Maternal age
b. Parity
c. Anemia
d. Hypertension
e. Alcohol consumption Key: e

4. A newly married couple visits family planning centre for contraception. Upon investigation the woman has hyperlipidemia. The method of contraception which would be used cautiously in this woman is:
a. Condom
b. Combined oral contraceptive pill
c. Second generation IUCD
d. Mini pill
e. Nor-plant Key: b

5. A 35 years old woman was brought to hospital with toxic shock syndrome. She was using some method of contraception. The method of contraception which had lik`ely lead to this condition is:
a. Condom
b. Diaphragm
c. Vaginal douching
d. Oral pills
e. Norplant Key: b

6. A 34 years old woman presented in the emergency department to a lady doctor with painful vulvar ulceration. On examination the ulcer had irregular margins with undermined edges. The ipsilateral inguinal lymph nodes were swollen and tender. The most likely diagnosis is:
a. Syphilis
b. Herpes
c. Chancroid
d. Lymphogranuloma venereum
e. HIV Key: c

7. A 30 years old lady having two kids wants to plan her family. On examination she is found to be anemic. She also gives history of ectopic pregnancy last year. The best method of contraception for her would be:
a. Lippe's loop
b. Injectable contraceptives
c. Progestasert
d. Multi-load
e. Cu-T Key: b

8. A 42 years old female wants to use oral contraceptive pills. She is 55 kg of weight and beetle chewer. On general examination she was found to be suffering from mild depression. This contraceptive method should be used cautiously in this woman because of her:
a. Age
b. Excess weight
c. Low weight
d. Beetle chewing habit

e. Depression

Key: a

9. For long term contraception, a sub -dermal implant know as “nor-plant” is being used now a days. The main disadvantage of Norplant is:

a. Spontaneous expulsion
b. Irregular menstrual bleeding
c. Pelvic inflammatory disease
d. Ectopic pregnancy
e. Venous thrombosis

Key: b

10. A primary Gravida with O- ve blood group comes to labour room with labour pains. Her husband’s blood group is O+ve. In order to avoid Rh incompatibility in pregnancy, which measure would you take:

a. Administer antiRh immunoglobulins at delivery
b. Serial ultrasonography
c. Chorionic villous biopsy
d. Amniocentesis
e. Beta HCG monitoring

Key: a

11. An 8 weeks pregnant lady comes to gynae OPD for antenatal visit for the first time. She told the doctor that she has come from far off area and it’s not possible to come for her monthly antenatal visits. The doctor advised the minimum number of essential antenatal visits is:

a. 3
b. 4
c. 5
d. 6
e. 8

Key: a

12. A 25 years old para 2 delivered a baby boy last month. She went to a family planning center to seek advice for contraception. The frequency of breast feeding at night is more. The best way to avoid conception in the first four months following delivery is the use of:

a. Oral contraceptive
b. Male pills
c. Injectable contraceptive
d. 3rd generation IUCD
e. no contraception

key: e

13. A nulliparous woman is presented in the OPD with severe bleeding after taking some contraceptive method. The gynecologist mimetically assessed that cause of bleeding was:

a. Copper T
b. Oral contraceptive
c. lippe’s loop
d. Norplant
e. vaginal sponge

key: c

14. A primigravida with 30 weeks of gestation visit OPD for routine checkup. Her B.P was found to be 160/90 mm Hg. The doctor advised to report immediately if she develops:

a. Abdominal pain
b. Vaginal bleeding
c. Tinnitus
d. Swelling of the feet
e. Fever

Key: d

OCCUPATIONAL HEALTH

1. A person aged 40 years, working as a laborer in grain market for the last 25 years presented with a history of repeated attacks of respiratory infections in the last 1 year. X-ray showed pulmonary fibrosis. The likely diagnosis was:

a. Tuberculosis
b. Silicosis
c. Silicotuberculosis
d. Farmer's lung
e. Baggassosis

Key: True: d

2. An industrial worker reported to you with complaints of cough, history of dyspnoea on exertion and pain in the chest. His X-ray chest showed snow storm appearance. The diagnosis would be:

a. Asbestosis
b. Siderosis
c. Silicosis
d. Aspergillosis
e. Byssinossis

Key: True: c

3. An occupational worker presented with complaints of exertional dyspnoea. He gave history of being in an industry dealing with spare parts such as gas kit and brakes, he also gave history of smoking for about five years. His X-ray chest showed a ground glass appearance / honey combing in the lower two thirds of the lung fields. The likely condition that he suffers from is:

a. Silicosis
b. Anthracosis
c. Asbestosis
d. Siderosis

Key: True: c

4. A worker who had been in the battery manufacturing unit for the last 20 years, reported to you with complaints of loss of appetite and abdominal colic of 2 weeks duration. You will prefer to investigate him for:

a. Cholecystitis
b. Lead poisoning
c. Appendicitis
d. Ameobiasis
e. Ca stomach

Key: True: b

5. In a lead pipe factory, you want to carry out a screening programme in workers to exclude lead poisoning. Your choice of the most useful screening test will be measurement of:
   a. Lead in blood
   b. Lead in urine
   c. Coproporphyrin in urine
   d. Aminolaevulinic acid in urine
   e. Basophilic stipling of RBCs

Key: True: c

6. In an automobile manufacturing plant of Pakistan, a large number of employees are working in different sections. Persons who work in the section of welding the parts together have started reporting sick with redness of eyes. On examination conjunctivitis and keratitis are found. What could be the cause of this problem?
   a. Poor Personal Hygiene
   b. Heat
   c. Overwork
   d. Ultraviolet radiations
   e. Ionizing radiations

Key: True: d

7. Your opinion is sought as a Public Health Specialist by the employers of a glass factory in which some workers have developed Silicosis. The most important control measure that you recommend is:
   a. Pre-placement examination
   b. Adequate personal hygiene
   c. Substitution
   d. Periodic X-ray chest
   e. Rigorous dust control

Key: True: e

8. Twenty workers of a chemical factory located in an industrial area near Lahore, are handling irritant chemicals (dichromates) as part of their job. Such workers require periodic medical examination. What could be the appropriate frequency of such examinations in your opinion?
   a. Once a year
   b. Twice a year
   c. Monthly
   d. Weekly
   e. Daily

Key: True: d

Q#9. The commonest physical health hazard in most industries is:
   a. Heat
   b. Noise
   c. Humidity
   d. Ionizing radiation
   e. Light

Key: a

Q10. A worker of a brick kiln was brought to the emergency department, in an unconscious state. He was hypotensive and sweating profusely. The likely condition he suffered from was;

a. Heat stroke
b. Heat exhaustion
c. Erythrocyanosis
d. Heat Hyperpyrexia
e. Heat cramps

Key: b

Q11. A pottery industry worker developed symptoms of tuberculosis. The likely condition which resulted in tuberculosis was:

a. Anthracosis
b. Asbestosis
c. Begassosis
d. Silicosis
e. Byssinosis

Key: b

Q12. A shipyard worker presents with increasing breathlessness. His X-ray shows ground glass appearance in lower two thirds of lungs. He is likely to be suffering from:

a. Anthracosis
b. Silicosis
c. Asbestosis
d. Farmer's lung
e. Byssinosis

Key: c

Q13. A research team conducted a nation wide survey of Industries and factories. While arranging the data they observed that the most common occupational cancer was:

a. CA lung
b. CA bladder
c. CA skin
d. Leukemia
e. Cancer of Gastrointestinal tract.

Key: c

14. A rubber industry worker presents with abdominal colic and severe anemia. His blood examination reveals basophilic stippling of RBCs and microcytic anemia. What is the likely diagnosis?

a. Lead poisoning
b. Benzene poisoning
c. Radiation effects
d. Sideroblastic anemia
e. Worm infestation

Key: a

15. A 35 years old man working in roofing industry presented to his primary care physician with complaints of dyspnea and chronic dry cough. Chest X –ray revealed pulmonary hyperinflation with "honey – comb" appearance and calcified parietal pleural plaques. What is the most likely diagnosis?

a. Anthrocosis
b. Asbestosis
c. Byssinosis
d. Silicosis
e. Farmers lung

Key: b

16. In the mica mines of Bihar, out of 329 miners examined, 34.1 percent were found suffering with irritant cough, dyspnoea on exertion and pain in the chest. On chest X-ray there was "snow – storm" appearance in the lung fields. What is the most likely diagnosis?

a. Asbestosis
b. Anthracosis
c. Siderosis
d. Silicosis
e. Tobacosis

Key: d

17. An industrial worker presented with pulmonary tuberculosis. On X- rays Calcification and fibrosis were seen. The likely industry he had worked in is:

a. Sand blasting
b. Poultry
c. Cotton
d. Agriculture
e. Sugar

Key a

18. A child aged 3 years from a day care centre, was reported to a doctor with complaints of abdominal colic and constipation for the last 2 days, on examination there were blue-line on the gums and his appearance was pale. What is the most likely diagnosis?

Silicosis
Lead poisoning
Asbestosis
Anthrocosis
Silerosis

Key: b

19. In the mica mines of Bihar, out of 329 mines examined, 34.1 percent were found suffering with irritant cough, dyspnoea on exertion and pain in the chest. On chest X-ray there were "snow – storm" appearance in the lung fields. What is the most likely diagnosis?

a. Asbestosis
b. Anthracosis
c. Siderosis
d. Silicosis
e. Tobacosis

Key: d

IMMUNOLOGY

1. Most important reason for recommending oral polio vaccine in the polio eradication campaign despite availability of a safe injectable vaccine that, it:

a. Provides 90% immunity in one dose
b. Does not interfere with vertical immunity

c. Has been donated by WHO
d. Provides herd immunity
e. Has less side effects

Key: True: d

2. A 5 year old child comes to the immunization centre without BCG scar on his arm; what would you prefer?

a. Give BCG vaccine
b. Perform mantoux if positive then give BCG
c. No need of BCG
d. Chemoprophylaxis
e. Perform mantoux if negative then given BCG

Key: True: e

3. A woman reports for vaccination against tetanus only 25 days before delivery; she has not received the first dose. What will you do?

a. Give anti tetanus immunoglobulin
b. Give two doses of tetanus toxoid with 2 weeks interval
c. Advise appropriate antibiotic course during delivery
d. Give one dose of tetanus toxoid and advice the second dose after delivery
e. Advise passive immunization after delivery

Key: True: d

4. A woman in the seventh month of pregnancy reports to you in the antenatal clinic for the first time. The recommended immunization is by:

a. Tetanus toxoid
b. Hepatitis B vaccine
c. Rubella vaccine
d. Pneumococcal vaccine
e. Tetanus immunoglobulin

Key: True: a

5. A doctor was attending a patient suffering from Hepatitis B; he accidentally got a prick from a contaminatedsyringe. For maximum preventive use of Hepatitis B Immunoglobulin (HBIG), it is given as:

a. 0.5 ml / kg body weight within 2 hours
b. 0.5 ml / kg body weight within 24 hours
c. 0.06 ml / kg body weight within 3 days of exposure & repeating after one month
d. 0.06 ml / kg body weight preferably within 3 days
e. 0.05 ml / kg body weight within one month & repeating after 6 months

Key: True: c

6. A mother brought her six weeks old child to an EPI centre for routine immunization. She was enquired about history of Epilepsy in the family and febrile fits. The doctor took this history to avoid complication with:

a. Diphtheria toxoid
b. Tetanus toxoid
c. Hepatitis B vaccine
d. Pertussis vaccine
e. OPV

Key: True: d

7. A conference is being held for prevention of haemorrhagic fever in our country. The people from South Africa are also invited. Your opinion as a health expert is sought regarding transmission of prevalent infection in South Africa to Pakistan. The infection that you should be most concerned about is.

a. Dengue fever
b. Typhus
c. Hay fever
d. Congo fever
e. Yellow fever

Key: True: e

8. An M.B.B.S student of Wah Medical College got an accidental prick while drawing blood of hepatitis B positive patient. He had completed his course of immunization against hepatitis B last year. What would you recommend for him?

a. Booster dose of HB Vaccine
b. Single dose of passive immunization
c. Both active and passive immunization
d. Two doses of immunoglobulins 30 days a part
e. Nothing required

Key: True: d

9. A forty years old guard of forestry presented in emergency with complaint of dog bite on his left leg. On examination a deep transdermal wound was found. He gave history of completing the course of immunization against rabies last year. His serum antibody titre was > 0.5 IU/ml of blood. What would you advise?

a. Complete course of active immunization & passive immunization
b. Only passive immunization
c. Two booster doses of HDC vaccine
d. Three booster doses of HDC vaccine + RIG
e. Only local treatment of wound and anti tetanus measures

Key: True: c

10. A 20 years old lady read an article in a newspaper on vaccination against tetanus. She is very conscious of herself being vaccinated. The best schedule that you would suggest for her at this age is:

a. Single dose of TT
b. Two doses of TT one month apart
c. Two doses one month apart with booster after five years
d. Five doses of TT
e. Nothing required till she gets pregnant

Key: True: d

11. A 30 years old man went in Benazir Bhutto's rally at Rawalpindi, where in a suicidal attack he got a penetrating injury on his leg. The emergency treatment was given. His immunity status against tetanus is not known. The required anti tetanus measures are.

a. Toxoid one dose
b. Toxoid one dose + TIG
c. Toxoid complete course
d. Toxoid complete course + TIG
e. Fifteen hundred international units of ATS

Key: True: d

12. A primigravida came for antenatal. Her base line investigations along with screening for Hepatitis B and C were done. She was diagnosed HBV positive. What measure would you suggest to prevent the infection in her child after delivery?

a. Active immunization only
b. Active & passive Immunization
c. Only passive immunization
d. Chemoprophylaxis
e. Reassurance

Key: True: b

13. A 6 weeks old boy came for DPT, polio & HBV vaccination. He was given initial doses of all and was called after 4 weeks to have the next doses. The likely reason for calling him again was:

a. Loss of immune memory
b. Stimulation of macrophages
c. Summation of immune responses
d. Replication of lymphocytes
e. Immune tolerance

Key: True: c

14. A GP purchased BCG vaccine for his clinic. He should store this vaccine at his clinic in:

a. A dark place
b. Deep freezer
c. Water carrier
d. Refrigerator
e. Shelf

Key: True: d

15. A mother brought her four year old child to the doctor. She gave the history that her child was in close contact with a case of diphtheria in school. She was very anxious about her child and gave history of booster dose of DT 2 years ago. What would be line of management for such a child?

a. Booster dose of DT with penicillin
b. Active and passive immunization
c. Active and passive immunization with chemoprophylaxis
d. Only keep under surveillance for 1 week
e. Nothing more required

Key: a

16. A General Practitioner purchased BCG vaccine for his clinic. He should store this vaccine at his clinic in:

a. A dark place
b. Deep freezer
c. Water carrier
d. Refrigerator
e. Shelf

Key: True: d

17. A 5 years old boy is brought to the emergency department with history of dog bite. Examination revealed multiple transdermal bites on left leg. The best management for such a patient is:

a. Anti rabies serum, suturing of wound, TT
b. Anti rabies serum, suturing of wound, Vaccine
c. Vaccine, leave wound open, TT, ARS
d. Vaccine, leave wound open, TT
e. No Treatment if the dog disappears

Key: c

18. 1 year old child is being treated in Shaukat Khanam Hospital Lahore and getting radiotherapy for carcinoma. A polio case has been detected in his residential locality. Pediatrician decides to protect him against poliomyelitis by giving:

a. Human normal immunoglobulin
b. Human specific immunoglobulin
c. Oral polio vaccine
d. Inactivated polio vaccine
e. Chemoprophylaxis with antiviral drugs

True : d

19. Most important reason for recommending oral polio vaccine in the polio eradication campaign despite availability of a safe injectable vaccine is that, it:

a. Provides 90% immunity in one dose
b. Does not interfere with vertical immunity
c. Has been donated by WHO
d. Provides herd immunity
e. Has less side effects

Key: d

20. A 6 months pregnant lady comes for antenatal checkup for the first time. Her baseline investigation and screening for HBSAG and Anti HCV was done. On screening she was found to have HBSAG. What would you prefer for this lady?

a. Active and passive immunization
b. Passive immunization
c. Active immunization
d. Anti viral therapy
e. Advice for active and passive immunization of the baby at birth.

Key: e

21. In Sir-syed Model School a student of class 3 developed measles. The child was isolated from rest of the class. The school medical officer advised for the contest of this child:

a. Active immunization within 3 days
b. Passive immunization
c. Chemoprophylaxis
d. Isolation
e. Anti viral therapy

Key: b

22. A primigravida delivered a baby boy in the obstetric ward of POF hospital the doctor referred the baby on the same day to the EPI centre for vaccination of:

a. BCH only

b. BCG OPV
c. DPT only
d. DPT HBV +OPV
e. OPV only

Key: b

ENVIRONMENT

1. The population living in Wah Cantt is using water from a deep spring, which is considered to be relatively free from organic contamination but rich in calcium bicarbonates and sulphates. On account of properties that spring water has, protects people from:
a. Gastroenteritis
b. Ancylostomiasis
c. Atherosclerosis
d. Renal problems
e. Degenerative heart disease

Key: True: c

2. A well was present in a rural area where an unsanitary bore-hole latrine with lots of flies was present within 10 feet of distance. The disease more likely to be transmitted through drinking this well water is:
a. Leishmaniasis
b. Typhoid
c. Dental caries
d. Ancylostomiasis
e. Trachoma

Key: True: b

3. If a child has been drinking water containing 30 mg/L of nitrates the condition likely to occur is:
a. Infantile Methemoglobinemia
b. E-coli enteritis
c. Botulism
d. Dental caries
e. Entrobiasis

Key: True: a

4. Required amount of chlorine was added to a large body of water after sedimentation. The pH of water was 4.0 and level of sulphides was negligible. A contact period of one hour was ensured. Eventually, it was found that chlorination was not successful. The likely reason was:
a. Low pH
b. Less contact time
c. Less amount of chlorine
d. Suspended impurities
e. Chemical antagonists

Key: True: a

5. People of a village reported a high prevalence of bacterial gastroenteritis even after proper chlorination of water supply for the recommended duration. On water analysis, level of chlorine in water was 0.01 mg/L and pH of water was 6.5. There were no suspended

impurities; levels of sulphides and ferrous were low. The likely reason of increased bacterial gastroenteritis even after chlorination is:

a. Low residual chlorine
b. High pH leading to chlorination failure
c. Presence of sulphides
d. Low level of ferrous
e. Inadequate contact time

Key: True: a

6. A water sample was taken from a source where catchment area included a large agricultural land. It was declared unfit for human consumption on account of raised concentration of a chemical. The likely chemical which has resulted in making this water unfit is:

a. Iodine
b. Calcium
c. Zinc
d. Chlorides
e. Nitrite

Key: True: e

7. During a sanitary inspection of a rapid sand filtration plant, slowing of the filtration rate was observed owing to loss of head. Which method will you suggest to give head to water in such a situation?

a. Addition of alum
b. Scraping the top layer
c. Increasing duration of storage
d. Back washing of sand bed
e. The addition of lime or soda ash

Key: True: d

8. You were required to chlorinate well water; you added required amount of bleaching powder solution to the water and allowed an overnight contact time. What is your recommendation regarding consumption of this water for drinking.

a. Fit for consumption
b. To be used after 12 hours
c. To be used after another 24 hours
d. Rechlorinate
e. May be used after boiling

Key: True: a

9. A dental surgeon appointed in rural health centre reports an increased incidence of dental carries in the children of that area. The relevant preventive measure that he should suggest to the health authorities is:

a. Fluoridation of water
b. Chlorination of water
c. Use of bacterial filter
d. Use of boiled water
e. Softening of hard water

Key: True: a

10. Chlorination of water was done by addition of bleaching powder solution containing 10% available chlorine. One hour contact time was ensured. What is your recommendation regarding use of this water for drinking?

a. Fit for consumption
b. Use after 06 hours
c. Use after 12 hours
d. To be used after another 24 hours
e. Rechlorinate

Key: True: e

11. Water samples from two villages of Punjab were sent to Health laboratory for examination. Lab reports show fluoride levels ranging form 5.26 to 6.32 mg/lit. Use of this water for drinking may lead to:

a. Dental caries
b. Dental flourosis
c. Gingivitis
d. Periodontitis
e. Alveolar abscess

Key: True: b

12. An out-break of scabies was reported in a Kachi abadi consisting of 500 people. The appropriate preventive measures suggested by you would be to:

a. Filter the water
b. Improve accessibility to water
c. Destroy breeding sites of insects
d. Chlorinate water
e. Avoid bare footed watering of fields

Key: True: b

13. A sample of water taken from a water storage tank of a residential area was to be examined bacteriologically. A positive test of water sample by multiple tube method refers to the presence of

a. Coli-form organisms
b. Fecal streptococci
c. Nitrites
d. Cl. Perfringens
e. Fungi

Key: a

14. An epidemic of gastroenteritis affected more than 500 people in a city. Samples of water were taken from different sites of the supply system. Bacteriological examination was positive for coli forms. Chemical analysis of water showed the presence of high fluoride, nitrate, chloride and ph of 6. Which content is suggestive of water born epidemic

a. Nitrates
b. Chlorides
c. High pH
d. Coli-forms
e. Fluoride

Key: d

15. Different agents are used for chlorination of water on large scale. If after chlorination taste of water is not much altered; level of residual chlorine is more stable and persistent. The likely agent to be used for chlorination was:

a. Bleaching powder
b. Chlorine gas
c. Chloramines
d. Perchloron
e. Chloride ions

Key: a

16. In a poor community, there is high prevalence of acute diarrhea cases. The best method for preventing this health problem in the long run is:

a. Anti diarrheal drugs.
b. Immunization against cholera and typhoid
c. Provision of sanitary latrine.
d. Use of boiled water.
e. Living in fly proof zone.

Key: True: c

17. Six of the ten family members living in a single room house complain of intense itching with scratching in axillae, groin and hands; it is more marked at night. The most likely diagnosis is:
18. Scabies
19. Dermatitis
20. Eczema
21. Psoriasis
22. Dermatosis

Key : a

1. In a house consisting of two living rooms, the door and windows are facing each other. This will provide:
    2. a. Low humidity
    3. b. Aspiration
    4. c. Cross ventilation
    5. d. Diffusion
    6. e. Acoustic discomfort

Key : c

1. A 12 members family was living in a house consisting of two rooms. Which disease is most likely to be common in the given situation:
    2. f. Asthma
    3. g. Tuberculosis
    4. h. Ca. Bronchus
    5. i. Cystic fibrosis
    6. j. Emphysema

Key : b

1. A 5 member family was residing in a small house. The available floor space to one person was 30 sq ft. The problem which is more likely to be associated with this available space is:
    2. k. Psychosocial
    3. l. Malnutrition
    4. m. Typhoid
    5. n. Enterobius vermicularis
    6. o. Malaria

Key : a

21. A water sample was taken from a village near Taxila. On chemical analysis the fluoride level was found to be 0.03 mg/lit. The likely effect on the body is:
    a. Dental flourosis
    b. Dental caries
    c. Skeletal flourosis
    d. Caries spine
    e. Abdominal colic

Key: b

22. A water sample taken from a water storage tank of a residential area was sent for bacteriological examination in the laboratory. A test of water sample by multiple tube method was found positive, which referred to the presence of:
    a. Coli-form organisms
    b. Fecal streptococci
    c. Nitrites
    d. Cl. Perfringens
    e. Fungi

Key: a

23. An army troop while being transported to Himalayan station had to stay at the altitude of 12,000 feet for 04 days. One of the soldiers developed pulmonary edema. The best immediate measure to be taken is:
    a. Antibiotic therapy
    b. Suction of pulmonary fluids
    c. Artificial respiration
    d. Shift the patient to lower altitude
    e. Administer diuretics

Key: d

24. A Person working in compressed air chamber presented with symptoms of cough, dyspnoea and joint pains. This clinical presentation is suggestive of:
    a. Pulmonary edema
    b. Fat embolism
    c. Air embolism
    d. Rupture of spleen
    e. Myocardial infarction

Key: c

25. The atmospheric pressure at earth's surface close to the sea level averages 760 mm of Hg. If a man lives at an altitude of 13000 feet above the sea level for few years, the main physiological effect is:

a. Decrease in respiration
b. Increase in concentration of hemoglobin
c. Decrease in concentration of hemoglobin
d. Decrease in cardiac output
e. Increased concentration of urine

Key: b

26. Husband and wife belonging to low socioeconomic status of a village are brought to the hospital with mental confusion, loss of memory, labored breathing eventually leading to coma. There is history of using coal fire, what is the most probable diagnosis:

a. CO_2 poisoning
b. CO poisoning
c. Hydrogen sulphides poisoning
d. Sulphur dioxide poisoning
e. Nitrogen dioxide poisoning

Key: b

27. In the "Blake Hole of Kalkata", 146 prisoners were imprisoned in a room 18x14x10 out of whom only 23 survived. There were two small windows which were adequate to supply all the oxygen needs – even than only 23 survived. What is the most likely cause of death?

Decreased oxygen
Increased carbondioxide
Increase ammonia
Heat retention
Lack of sunlight

Key: d

28. A survey on air pollution was conducted in an urban area to determine the major contaminant in air. The major contaminant estimated in all air pollution is:

Grit an dust
Sulphus dioxide
Carbon monoxide
Nitrogen dioxide
Smoke index

Key: b

29. In the "Blake Hole of Kalkata", 146 prisoners were imprisoned in a room 18x14x10 out of whom only 23 survived. There were two small windows which were adequate to supply all the oxygen needs – even than only 23 survived. What is the most likely cause of death?

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Key: d

30. A survey on air pollution was conducted in an urban area to determine the major contaminant in air. The major contaminant estimated in all air pollution is:

Grit an dust
Sulphus dioxide
Carbon monoxide
Nitrogen dioxide
Smoke index

Key: b

31. A 50 years old industrial worker presented to doctor with complaints of whistling, buzzing and deafness. He had been working for 8 hrs in a day with exposure to noise of 90 db and 2000 Hz. What is the most likely cause of his condition?

a. Age
b. Stress
c. Duration of work
d. Loudness of sound
e. Frequency of sound

Key: d

32. A person presented with hearing loss after 12 hours of noise exposure. This hearing loss disappeared shortly afterwards. The frequency of noise is likely to be between the ranges of:

a. 1000 – 2000 Hz
b. 2000 – 4000 Hz
c. 4000 – 6000 Hz
d. 6000 – 8000 Hz
e. 8000 – 10,000 Hz

Key: c

GENERAL EPIDEMIOLOGY

1. While investigating a point source epidemic it was found that 120 students ate five different foods (meat burgers, fried fish, steak, rice and fruit salad). The relative risk was calculated for all those five foods. It was concluded that fish was not responsible for this epidemic. The relative risk of fish is:

a. 0.7
b. 1.2
c. 1.7
d. 3.0
e. 7.0

Key: True: a

In a prospective study of the relationship between oral contraceptive use and the subsequent risk of developing endometrial cancer, a cohort of 1000 women were followed for 5 years. The results were as follows:

	Present	Absent
	A 245	B 75
	C 50	D 630

A + C = 295 B + D = 705 n = 1000

2. What is the incidence rate (absolute risk) of endometrial cancer among who didn't use oral contraceptives?
   a. 630 / (50 + 630)
   b. 75 / (245 + 75)
   c. 50 / (50 + 630)
   d. 245 / (245 + 75)
   e. Insufficient data

Key: True: c 50/(50 + 630)

In a prospective study of the relationship between oral contraceptive use and the subsequent risk of developing endometrial cancer, a cohort of 1000 women were followed for 5 years. The results were as follows:

	Present	Absent
	A 245	B 75
	C 50	D 630

A + C = 295 B + D = 705 n = 1000

3. What was the incidence rate (absolute risk) of endometrial cancer among women who used oral contraceptives?
   a. 630 / (50 + 630)
   b. 75 / (245 + 75)
   c. 50 / (630 + 50)
   d. 245 / (245 + 75)
   e. Insufficient data

Key: True: d 245/(245 + 75)

In a prospective study of the relationship between oral contraceptive use and the subsequent risk of developing endometrial cancer, a cohort of 1000 women were followed for 5 years. The results were as follows:

	Present	Absent
	A 245	B 75
	C 50	D 630

A + C = 295 B + D = 705 n = 1000

4. What is the incidence rate (absolute risk) of endometrial cancer among women who used oral contraceptives in person-years? If the study was carried out for five years.

a. 630 / (680 x 5)
b. 75 / (320 x 5)
c. 50 / (630 x 5)
d. 75 / (320 + 5)
e. 245 / (320 x 5)

Key: True: e 245 / (320 x 5)

In a prospective study of the relationship between oral contraceptive use and the subsequent risk of developing endometrial cancer, a cohort of 1000 women were followed for 5 years. The results were as follows:

	Present	Absent
	A 245	B 75
	C 50	D 630

A + C = 295 B + D = 705 n = 1000

5. What is the relative risk in this study?

a. [75 / (245 + 75)] / [50 / (50 + 630)]
b. [75 / (245 + 75)] / [630 / (50 + 630)]
c. [50 / (245 + 50)] / [630 / (75 + 630)]
d. [245 / (245 + 75)] / [50 / (50 + 630)]
e. Insufficient data

Key: True: d [245 / (245 + 75)] / [50 / (50 + 630)]

6. Among 10 women with cervical cancer, medical records confirm a past history of herpes simplex type II infection in eight. What is the relative risk of developing cervical cancer in women with a history of HSV type II infection?

a. 8/10
b. 10/8
c. 8/2
d. 2/10
e. 2/8

Key: True: c

7. In an outbreak of cholera in a village of 2,000 population, 20 cases have occurred and 5 died. Case fatality rate is:

a. 1%
b. .25%
c. 5%
d. 25%
e. .0025%

Key: True: d

Questions # 8-9.

The results of a study of the incidence of pulmonary tuberculosis in a village in India are given in the table below. All persons in the village are examined during two surveys made 2 years apart, and the number of new cases was used to determine the incidence rate.

Category of Household at First survey	Number of Persons	Number of New cases
With culture positive case	500	10
Without culture positive case	10,000	10

8. What is the incidence of new cases per 1000 person years in households that had a culture positive case during the first survey?

a. 0.02
b. 0.01
c. 1.0
d. 10
e. 20

Key: True: d

$$\frac{\text{10 new cases}}{\text{500 persons x 2 years}} = \text{10 cases/1000 persons years}$$

9. What is the incidence of new cases per 1000 person years in households that did not have a culture positive case during the first survey?

a. 0.001
b. 0.1

c. 0.5
d. 1.0
e. 5.0

Key: True: c

$$\frac{\text{10 new cases}}{\text{10,000 persons x 2 years}} = 0.5 \text{ cases/1000 persons years}$$

10. In a population of 1000, measles coverage is 60%, one child goes out of station and comes back with measles from whom 20 more children get measles. Secondary attack rate of measles is:

a. 0.65%
b. 5%
c. 6%
d. 6.5%
e. 7%

Key: True: b

11. A village has total of 100 under-five children. The coverage with measles vaccine in this age group is 60%. Following the occurrence of a measles case in a child after a visit outside, twenty- six children developed measles. The secondary attack rate of measles is:

a. 25%
b. 40%
c. 50%
d. 65%
e. 66%

Key: True: e

12. If an epidemiologist while investigating an epidemic makes a graph to plot distribution of cases of disease by the time of onset and gets a polymodal distribution curve. The most likely disease is:

a. Salmonellosis
b. Staphylococcal food poisoning
c. Measles
d. Typhoid
e. Hepatitis A

Key: True: c

13. 10 cases of food poisoning had been reported in hospital, 2 out of these developed mild gastrointestinal symptoms, 4 developed moderate dehydration but recovered and 2 succumbed to the disease. The characteristic of the organism of food poisoning that produces the severest form of the disease is:

a. Infectivity
b. Pathogenecity

c. Virulence
d. Communicability
e. Resistibility

Key: True: c

14. Public Policies in Pakistan aim at avoiding the underlying reasons for the development of environmental and atmospheric concentration of SO_2 to protect the health of people. It's an example of
a. Primordial
b. Primary
c. Secondary
d. Rehabilitation
e. Screening

Key: True: a

15. The number of deaths due to diarrhoea, total cases of measles, total number of accidents and the total number of drug addicts were to be reported by a researcher. The best title given to all of this data would be:
a. Mortality data
b. Morbidity data
c. Case fatality rate
d. Addiction rate
e. Health related data

Key: True: e

16. When total number of deaths due to measles is presented in relation to the total cases of measles, it is best labeled as:
a. Cause specific death rate
b. Incidence rate
c. Prevalence rate
d. Case fatality rate
e. Proportional mortality

Key: True: d

17. Japanese have a higher rate of stomach cancer and a low rate for colon carcinoma than the U.S. However third generation descendents of Japanese immigrants to U.S have rates of stomach & colon cancer like that of U.S. This particular characteristic supports effects of:
a. Environment
b. Genetics
c. Mutation
d. Accidents
e. Misinterpretation

Key: True: a

18. Influenza pandemic occurs after every 7 – 10 years. This kind of disease distribution in time is known as:
    a. Secular trend
    b. Short time fluctuation
    c. Cyclical trend
    d. Seasonal trend
    e. Endemicity

Key: True: c

19. If the age incidences curve of leukemia shows two peaks it is suggestive of bimodality. Bimodality usually signifies:
    a. Non homogeneity
    b. Cluster sampling
    c. Large number of observations
    d. Accuracy
    e. Short duration of disease

Key: True: a

20. A doctor is required to study the incidence of silicosis in a stone cutting industry, which study design should he choose:
    a. Longitudinal
    b. Cross-sectional
    c. Ecological surveys
    d. Case reports
    e. Case series report

Key: True: a

21. The health statistics department revealed that the sale of anti-Asthma drugs was more in those countries where Asthma deaths were more. This association may prove wrong when the individual based study designs are conducted. This association is an example of:
    a. Ecological fallacy
    b. Berkesonian bias
    c. Indirect association
    d. Temporal association
    e. Specific association

Key: True: a

22. A researcher wanted to study the time sequence to prove the concept of causativity, which design of study should be preferred by the researcher:

a. Longitudinal
b. Cross-sectional
c. Case report
d. Case series report
e. Quasi experimental

Key: True: a

23. Smoking leads to esophageal carcinoma. Coffee intake has its effect on smoking and also esophageal carcinoma. This factor can distort the results of the study which intends to prove an association between smoking and esophageal cancer. This effect of this factor is known as:

a. Confounding
b. Multiple causation
c. One to one relationship
d. Dose response relation
e. Strength of association

Key: True: a

24. The health authorities are launching a smoking cessation program by designing different activities for the smokers. These are very expensive but still useful as a large proportion of lung cancer will be eliminated if smoking is stopped. This proportion of lung cancer can be indicated by:

a. Relative risk
b. Prevalence
c. Attributable risk
d. Attributable fraction
e. Incidence density

Key: True: d

25. A researcher was studying maternal mortality in Rawalpindi District. He observed more deaths in women who were brought to hospital and without taking other factors into account concluded that hospital managed cases have more mortality as compared to home deliveries. This is an example of:

a. Indirect association
b. Relative risk
c. Spurious association
d. Attributable risk
e. Causal association

Key: True: c

26. Early diagnosis & prompt treatment is focused on:

a. Disease identification
b. Host factors
c. Environmental factors

d. Restoration of ability
e. Behaviour modification

Key: True: a

27. An expert in the field of public health is required to estimate the magnitude of a health problem. Which rate would he calculate for this?
a. Incidence
b. Prevalence
c. Case fatality
d. Proportionate mortality
e. Cause specific mortality

Key: True: b

28. When the number of educated females is expressed as a percentage of total females present in a village. It is known as:
a. Proportion
b. Rate
c. Ratio
d. Frequency
e. Cumulative frequency

Key: True: a

29. The trend in mortality from tuberculosis in England showed a steady fall in years 1855 – 1965 but thereafter a gradual rise in the incidence of this disease was reported. This type of time trend or fluctuation in disease occurrence is termed as:
a. Epidemic trend
b. Cyclical trend
c. Seasonal trend
d. Secular trend
e. Pandemic trend

Key: True: d

30. In the mid nineteenth century, an epidemiologist suggested that cholera was caused by drinking water in which an invisible agent is present. This type of association gives:
a. Specificity
b. Temporal sequence
c. Biological plausibility
d. Consistency
e. Gradient

Key: True: c

31. The incidence of pollen allergy at Wah Cantt is 10 cases per thousand populations. The mean duration of illness is 3 months from February to April. The prevalence of pollen allergy at Wah Cantt is:

a. 10
b. 20
c. 30
d. 40
e. 50

Key: True: c

32. When a new treatment is developed that delays deaths but does not produce recovery from a chronic disease, which of the following will occur.

a. Prevalence of the disease will decrease
b. Incidence of the disease will increase
c. Prevalence of the disease will increase
d. Incidence of the disease will decrease
e. Incidence & prevalence of the disease will decrease

Key: True: c

33. If the number of deaths from tuberculosis is expressed in relation to the total mid year population, it is:

a. Case fatality rate
b. Age specific death rate
c. Proportionate mortality rate
d. Crude death rate
e. Cause specific death rate

Key: True: e

34.

	Present	Absent
	A 200	B 100
	C 100	D 200

A + C = 300 B + D = 300 n = 600

In a cohort study concerning the relationship between the use of exogenous estrogens and the subsequent risk of breast cancer, a sample of 1000 pre- menopausal women were followed for 8 years. The results are presented in the table above. The absolute risk / incidence of blood cancer among women receiving estrogen therapy is:

a. 0.6

b. 0.2
c. 0.3
d. 0.4
e. 0.8

Key: True: a

35. The proportion of the disease in a population that would be eliminated if the risk factor is eliminated is determined by:
a. Relative risk
b. Absolute risk
c. Attributable fraction
d. Odds ratio
e. Exposure rate

Key: True: c

36. A 39-year-old man who presents with a mild sore throat, fever, malaise, and headache is treated with penicillin for presumed streptococcal infection. He returns after week with hypotension, fever, rash, and abdominal pain. He responds favorably to chloramphenicol, after a diagnosis of Rocky Mountain spotted fever is made. Which option explains the given example?
a. Case series report
b. Case-control study
c. Clinical trial
d. Cohort study
e. Case report

Key: True: e

37. A total of 3500 patients with thyroid cancer are identified and surveyed by patient interviews regarding past exposure to radiation. Which options explains the given example?
a. Case series report
b. Case-control study
c. Clinical trial
d. Cohort study
e. Case report

Key: True: a

38. A total of 10,000 Vietnam veterans, half of whom are known by combat records to have been in areas where Agent Orange was used and half of whom are known to have been in areas where no Agent Orange was used, are asked to give a history of cancer since discharge. Which option explains the given example?
a. Case series report

b. Case-control study
c. Clinical trial
d. Cohort study
e. Case report

Key: True: d

39. Patients admitted for carcinoma of the stomach are age and sex-matched, with smoking history to assess the possible association. Which option explains the given example?
a. Case series report
b. Case-control study
c. Clinical trial
d. Cohort study
e. Case report

Key: True: b

40. California highway patrol statistics revealed that more accidents occurred to blue cars than to cars of any other colour. The inference that, while driving a blue car, one is at higher risk of accident than while driving a car of another colour is:
a. Correct
b. Incorrect, because the comparison is not based on rates
c. Incorrect, because no control or comparison group is used
d. Incorrect, because no test of statistical significance has been made
e. Incorrect, because prevalence is used instead of incidence

Key: True: b

41. In a study of 500 cases of a disease and 500 controls, the suspected etiological factor is found in 400 of the cases and 100 of the controls. The absolute risk (incidence) of disease in persons with the factor is:
a. 80%
b. 40%
c. 16%
d. 20%
e. Cannot be computed from data given

Key: True: e

42. In 1945, 1,000 women were identified who worked in a factory painting radium dials on watches. The incidence of bone cancer in these women up to 1975 was compared to that of 1,000 women who worked as telephone operators in 1945. Twenty of the radium dial workers

and four of the telephone operators developed bone cancer between 1945 and 1975. The relative risk of developing bone cancer for radium dial workers is:

a. 2
b. 4
c. 5
d. 8
e. cannot be computed from the data given

Key: True: c

43. Prophylactic administration of vitamin K in breast fed babies is an example of:

a. Health Promotion
b. Treatment
c. Specific protection
d. Rehabilitation
e. Primordial prevention

Key: True: c

44. In an epidemiological study the incidence of disease in females is more than that of males but the prevalence is equal in both. It indicates:

a. Case fatality is more in female
b. Mortality in male is higher
c. Disease is of less duration in males
d. Females harbour disease for longer duration
e. Males harbour disease for longer duration

Key: True: a

45. Bhopal gas tragedy is an example of:

a. Slow epidemic
b. Continuous epidemic
c. Point source epidemic
d. Propagated epidemic
e. An accident which did not warrant an emergency

Key: True: c

46. Residents of three villages with three different types of water supply were asked to participate in a study to identify cholera carriers because several cholera deaths had occurred in the recent past. Virtually everyone was present at the time of examination. The proportion of carriers in each village was computed and compared. This study is a:

a. Cross-sectional study
b. Case-control study
c. Concurrent cohort study

d. Non-concurrent cohort study
e. Retrospective cohort study

Key: True: a

47. In a village of 1 lakh population, among 20,000 exposed to smoking, 200 developed cancer, and among 40,000people unexposed, 40 developed cancer. The relative risk of smoking in the development of cancer is:
a. 20
b. 10
c. 5
d. 15
e. 25

Key: True: b

48. In a population of 1000, measles coverage is 60%, one child goes out of station and comes back with measles from whom 26 more children get the measles. The secondary attack rate is:
a. 6.5
b. 65
c. 7.5
d. 0.65
e. 7.0

Key: True: a

49. To compare the death rate of India with the death rate of Pakistan, the most appropriate measure is a comparison between:
a. Age specific mortality rates
b. Crude death rates
c. Maternal mortality rates
d. Standardized mortality rates
e. Life expectancy

Key: True: d

50. About 2500 deaths were reported in road side accidents during the year 2006 in Pakistan. If the total number of deaths due to accidents is expressed against the mid year population of Pakistan in year 2006 this will give:
a. Crude death rate
b. Age specific death rate
c. Cause specific death rate
d. Case fatality rate
e. Proportional mortality rate

Key: True: c

51. In a universe comprising of 1500 children less than 5 years of age, 75 children with severe malnutrition were found. If 75 new cases of severe malnutrition were registered over a period of one year, the incidence rate for severe malnutrition during the same year is:

a. 50 / 1000
b. 53 / 1000
c. 55 / 1000
d. 60 / 1000
e. 63 / 1000

Key: True: b

52. Every year during the winter season the hospital admissions are more for pneumonia cases. This year also about 358 children with pneumonia were admitted in the Pediatric department of POF Hospital between the months of Jan – Mar 2007. This increased frequency of respiratory infections during winter months is an example of:

a. Epidemic trend
b. Cyclical trend
c. Seasonal trend
d. Secular trend
e. Pandemic trend

Key: True: c

53. Prevalence measures the burden of disease in a population inclusive of old & new cases. Prevalence of a disease can be obtained from:

a. Quasi – experimental study
b. Cross – sectional study
c. Case – control study
d. Cohort study
e. Intervention study

Key: True: b

54. A 55 years old hypertensive patient was admitted in the Medical Ward with cerebral stroke. After treatment he recovered but was unable to move his right lower limb. He was advised physiotherapy. This type of assistance is:

a. Health promotion
b. Specific protection
c. Prompt treatment
d. Disability limitation
e. Rehabilitation

Key: True: e

55. According to a study conducted by WHO the incidence of polio in Sindh province having a total population of 20 million was 1 during the year 2007, which type of study was this:

a. Case report
b. Cross sectional
c. Case control
d. Cohort
e. Ecological

Key: True: d

56. An epidemiologist is assigned to conduct a study on 5000 people having hyperlipidemia and those having normal lipid profile. He has to keep track of all the participants to observe the development of stroke in these patients to confirm that hyperlipidemia increases the risk of stroke. This study is:

a. Retrospective cohort study
b. Retrospective study
c. Prospective study
d. Cross – sectional study
e. Case – series

Key: True: c

57. To compare the death rate of Nepal with the death rate of Pakistan, the most appropriate measure is a comparison between:

a. Age specific mortality rates
b. Crude death rates
c. Maternal mortality rates
d. Standardized mortality rates
e. Life expectancy

Key: True: d

58. A 40 years old man of 75 kg came to a physician for his routine checkup. His serum cholesterol was found to be 230 mg/dL and he was diagnosed as hypertensive. The risk factor of this particular condition is classified as:

a. Physical
b. Chemical
c. Biological
d. Nutritive
e. Mechanical

Key: True: b

59. Acute hemorrhagic conjunctivitis affected a large proportion of population over a wide geographic area in 1971 and 1981. This spread of disease is:

a. Epidemic
b. Sporadic

c. Pandemic
d. Endemic
e. Opportunistic

Key: True: c

60. A patient came in emergency with signs of dehydration and severe diarrhea. An Intra venous infusion was given to correct electrolytes and fluid levels. He was discharged after 2 days. About 2 months later the patient came back with signs of jaundice and Hepatitis B surface antigen was positive. He did not give history of any event which could have lead to this disease. This hepatitis infection may be labeled as:

a. Sub clinical
b. Idiopathic
c. Opportunistic
d. Cross infection
e. Iatrogenic

Key: True: e

61. A cross-sectional study was conducted at Wah Medical College in the year 2006 to measure the period prevalence of smokers among 105 students. Out of them 5 were already smokers and 15 started during 2006, period prevalence of 2006 is:

a. 22%
b. 19%
c. 15%
d. 11%
e. 10%

Key: True: b

62. In a village of population 10,000, 250 cases of Hepatitis B were reported in the month of July. The point prevalence of Hepatitis B per thousand populations is:

a. 20
b. 25
c. 30
d. 50
e. 100

Key: True: b

63. A household survey of 10 families was conducted by students of 4th year MBBS, Wah Medical College. In the data they collected, the ages of heads of families were: 32, 34, 35, 36, 36, 42, 44, 46, 48, 52. The mean age of heads of families is

a. 36
b. 38.5
c. 40
d. 40.5
e. 42

Key: True: d

64. A woman brings her child to the hospital for mongolism. The possible agent of the disease that comes in your mind is?

a. Bacteria
b. Virus
c. Nutritional factor
d. Hormonal factor
e. Chromosomal factor

Key: True: e

65. A child of three years comes with complaints of night blindness. On examination conjunctiva is dry and corneal haziness is also seen. There is no history of any other disease or injury. The likely agent type is:

a. Physical
b. Chemical
c. Nutritional
d. Hormonal
e. Immunological

Key: True: c

66. A man brought his child with complaints of fever, diarrhea and abdominal pain. He gave history of living in an unhygienic small house around a factory area where his son had many friends. He had three more children who also had same complaints off and on. Which environment is likely to have resulted in this condition?

a. Physical
b. Chemical
c. Social
d. Psychological
e. Occupational

Key: True: a

67. A new drug was introduced in some of patients to assess its usefulness compared with the old one. Neither patients nor clinicians who evaluated patients for effect under consideration in this clinical trial knew individual treatment assignments. This method of assignment is known as:

a. Single blinding
b. Double blinding
c. Triple blinding
d. Randomization
e. Stratification

Key: True: b

68. 10 cases of food poisoning had been reported in a hospital, 2 out of these developed mild gastrointestinal symptoms, 4 developed moderate dehydration but recovered and 2 succumbed to the disease. The characteristic of the organism of food poisoning that produces the severest form of the disease is:

a. Infectivity
b. Pathogenicity
c. Virulence
d. Communicability
e. Resistibility

Key: True: c

69. The trend in mortality from tuberculosis in England showed a steady fall in years 1855 – 1965 but thereafter a gradual rise in the incidence of this disease was reported. This type of time trend or fluctuation in disease occurrence is termed as:

a. Epidemic trend
b. Cyclical trend
c. Seasonal trend
d. Secular trend
e. Pandemic trend

Key: True: d

70. An outbreak of brucellosis in cattle is reported, threatening the health of human population. This outbreak is:

a. Epizootic
b. Epornithic
c. Enzootic
d. Exotic
e. Epidemic

Key: True: a

71. A survey report in 1960 concluded that there was an increase in asthma deaths with the increased use of pressurized aerosol bronchodilators; although the deaths were more because of the severity of disease. This association is:

a. Spurious
b. Temporal
c. Indirect
d. Consistency
e. Coherence

Key: True: a

72. In a coal mine the expected deaths of coal worker were 7 while the deaths that really occurred were 9. The standardized mortality ratio for coal workers is:

a. 100
b. 109
c. 11

d. 5+
e. 129
f. 130

Key: True: d

73. At Lahore Grammar School a student of class II developed mumps. He was isolated from other children till swelling subsided and his brother of class IV who looked apparently healthy was also advised to be away from school for about a fortnight. His brother's type of carrier state is most likely to be:

a. Incubatory
b. Healthy
c. Convalescent
d. Temporary
e. Chronic

Key: True: a

74. In a colony located near an industrial area 50 people died due to asphyxia and many developed difficulty in breathing and were hospitalized within 24 hours. The cause was the leakage of carbon monoxide from a near by chemical plant. The distribution of cases in time is suggestive of:

a. Propagated epidemic
b. Slow epidemic
c. Common source – single exposure
d. Common source – continuous exposure
e. Pandemic

Key: True: c

75. Cement industry is suspected for more deaths among its workers. So the industrialist gets worried and wants to assess whether more deaths are likely in these workers or not. The measure that predicts the mortality in this industrial group is:

a. Age specific death rate
b. Standardized mortality ratio
c. Cause specific death rate
d. Proportionate mortality
e. Case fatality rate

Key: True: b

76. The annual report of POF Hospital for the year 2006 shows 200 cases of Myocardial Infarction, 35 cases of Cholecystitis, 105 cases of Pneumonia and 350 cases of Acute Gastroenteritis. The result of this report cannot be generalized on the total population of Wah on account of:

a. Confounding bias
b. Memory bias

c. Selection bias
d. Berkesonian bias
e. Interviewer's bias

Key: True: d

77. Increased number of Malaria cases was reported in the time intervals between August to October and March to April. There are 2 different periods in a year, where increased malaria transmission is reported. Such an occurrence of malaria cases in time will give a distribution which is:

a. Unimodal
b. Sporadic
c. Bimodal
d. Endemic
e. Multimodal

Key: True: c

78. .In the medical OPD of teaching hospital of Wah Medical College, Wah Cantt, diastolic blood pressures of 10 patients were as follows:
80 , 75 , 81 , 79 , 71 , 95 , 75 , 77 , 84 & 90. The mean of this data is:

a. 80
b. 81
c. 82
d. 83
e. 84

Key: True: b

79. In a poor community, there is high prevalence of acute diarrhea cases. The best method for preventing this health problem in the long run is:

a. Anti diarrheal drugs.
b. Immunization against cholera and typhoid
c. Provision of sanitary latrine.
d. Use of boiled water.
e. Living in fly proof zone.

Key: True: c

80. In a sample of 49 individuals, the mean total leukocyte count is found to be 7600 cells /mm^3, If total leukocyte count follows a normal distribution curve, the 50 % of the individuals will have which of the following values:

a. Between 6200 and 9000
b. Between 7400 and 7800
c. Below 6200 or Above 9000
d. Below 7600
e. Above 9000

Key True: d

81. In a sample of 49 individuals, the mean total leukocyte count is found to be 7600 cells /mm^3 and standard deviation of 1400 /mm^3, a randomly selected individual will have total leukocyte count lower than 4800 cell /mm^3

a. 1 % of the Time
b. 2.5 % of the Time
c. 5 % of the Time
d. 10 % of the Time
e. 16.5 % of the Time

Key True: b

82. Higher crude annual mortality rate in a developing country as compared to a developed country is mostly due to one of the following reasons:

a. An incorrect record keeping
b. A younger age distribution
c. An inaccurate census of the population.
d. More stressful life style
e. Greater exposure to occupational hazards.

Key True: b

83. Birth rates of a population of infants at 40 weeks gestational age are approximately normally distributed, with a mean of 3000 grams. Roughly 68% of such infants weigh between 2500 and 3500 at birth. If a sample of 100 infants was studied, the standard error would be

a. 50
b. 100
c. 250
d. 500
e. None of the above

Key: True: a

84. In 1993 Burkina Faso had Gross reproductive rate of 3.5 while United Kingdom was only 0 .86 that means if 1993 Fertility levels were to continue, which one of the following options will be correct.

a. The Net Reproductive Rate of Burkina Faso would definitely be more than 3.5
b. In United Kingdom, a woman would produce more than one daughter on average during her life time.
c. In Burkina Faso, a woman would produce 3.5 daughters on average through her life time
d. The Net Reproductive Rate of UK will be more than one.
e. The Net Reproductive Rate of Burkina Faso would be equal to Gross Reproductive Rate of the country

Key: True: c

85. The estimate of the average number of additional years a person could expect to live if the age specific death rates for a given year prevail for the rest of his life, is best expressed by:

a. Survival index
b. Probability of dying
c. Life expectancy
d. Crude death rate
e. Age specific death rate

Key: True: c

86. A patient who has come from India, reports to a health facility with generalized aches and pain and rash on the body excluding palms and soles. The most likely diagnosis is:

a. Scarlet fever
b. Trypanosomniasis
c. Malaria
d. Dengue
e. Yellow Fever

Key: True: d

87. In a medical journal report, the observed mortality of smokers and nonsmokers for laryngeal squamous cell carcinoma was reported to be significant at $p < 0.05$. Such a statement means that

a. The investigator is rejecting the null hypothesis even though the results could have occurred purely by chance a maximum of 5 times out of 100.
b. There is a difference between the mortality rates of smokers and nonsmokers 5% of the time
c. The null hypothesis claims that there is a difference between the mortality rates of smokers and nonsmokers.
d. A causal relationship between smoking and mortality may be established through this study
e. There is insufficient data, as the total number of smokers and nonsmokers were not given.

Key: True: a

88. In study carried out in the hospital ward, every 10^{th} admitted patient was included in the sample, which sampling procedure is this:

a. Random sampling
b. Stratified sampling

c. Quota sampling
d. Convenient sampling
e. Systematic sampling

Key: True: e

89. Three groups of subjects were followed over the course of five years to compare treatments for sideroblastic anemia. The most appropriate statistical analysis to determine the quantitative serologic differences resulting from these treatments would be a(n)

a. Regression analysis
b. F test (ANOVA)
c. Correlation analysis
d. Chi-square test
e. T test

Key: True: b

90.

	Breast Cancer Present	Breast Cancer Absent
	A 300	B 200
	C 100	D 400

A + C = 400 B + D = 600 n = 1000

In a cohort study concerning the relationship between the use of exogenous estrogens and the subsequent risk of breast cancer, a sample of 1000 premenopausal women were followed for 8 years. The results are presented in the table above. The absolute risk of blood cancer among women receiving estrogen therapy is

a. 0.2
b. 0.3
c. 0.4
d. 0.6
e. 0.8

Key: True: d

91. In a cohort study concerning the relationship between the use of exogenous estrogens and the subsequent risk of breast cancer, a sample of 1000 premenopausal women were followed for 8 years. The results are presented in the table above. The absolute risk of breast cancer among women who did not receive estrogen therapy is

a. 0.05
b. 0.2
c. 0.4
d. 0.6
e. 0.8

Key: True: b

92. In a cohort study concerning the relationship between the use of exogenous estrogens and the subsequent risk of breast cancer, a sample of 1000 premenopausal women were followed for 8 years. The results are presented in the table above. The relative risk associated with estrogen therapy in this study is

a. 0.25
b. 0.33
c. 0.5
d. 2
e. 3

Key: True: e

93. Following a large group of cigarette smokers for a period of 10 years to determine the occurrence of chronic obstructive pulmonary disease (COPD), coronary heart disease, and various forms of lung cancer would be an example of

a. Randomized clinical trial
b. Cross-sectional study
c. Prevalence study
d. Cohort study
e. Case-control study

Key: True: d

94. A nutritional research team followed serum levels of vitamin B_{12} and folic acid in 125 children for five years to determine the association between cyanocobalamin deficiency and the subsequent risk of developing megaloblastic anemia. The results were as follows:

VITAMIN B_{12} LEVELS

Mean	262 pg/mL
Median	228 pg/mL
Mode	196 pg/mL

From the data, it can be concluded that this distribution is

a. Normal
b. Positively skewed
c. Negatively skewed
d. Skewed toward the left
e. Unable to be identified

Key: True: b

95. If, in one of the groups of premature infants, the maximum value for hexosaminidase A was substituted with a much higher value, which of the given values remains unchanged:

a. Variance
b. Range
c. Standard deviation
d. Median
e. Mean

Key: True: d

96. In a cohort study involving the relationship between HIV status and the subsequent risk of developing pneumocystis carinii pneumonia, 50 HIV-positive volunteers were followed for 6 months: 100 for 1 year, 100 for 3 years, and 200 for 5 years. The number of person-years of observation in this study was

a. 9.5
b. 1425
c. Unable to be determined for different periods
d. Unable to be determined without a mortality rate
e. Unable to be determined without an incidence rate

Key: True: b

97. The smoking history of pregnant women is taken in the antenatal period and correlated with the birth weight at the time of delivery. To find an association between them would be an example of:

a. Clinical trial
b. Nested cohort study

c. Retrospective study
d. Prospective study
e. Cross sectional study

Key: True: d

98. In a study of 500 cases of a disease and 500 controls, the suspected etiological factor is found in 400 of the cases and 100 of the controls. The absolute risk (incidence) of disease in persons with the factor is:

a. 80%
b. 40%
c. 16%
d. 20%
e. Cannot be computed from data given

Key: True: e

99. Prophylactic administration of vitamin K in breast fed babies is an example of:

a. Health Promotion
b. Treatment
c. Specific protection
d. Rehabilitation
e. Primordial

Key: True: c

100. In a bulk of hundred children out of whom 28 are immunized 2 of them get measles simultaneously. Subsequently14 get measles. Assuming the efficacy of the vaccine to be 100%, what is the secondary attack rate?

a. 5%
b. 10%
c. 20%
d. 21.5%
e. 19.4%

Key: True: c

101. A village has a total of 100 under-five children. The coverage with measles vaccine in this age group is 60% (assuming the efficacy of vaccine to be 100%). Following the occurrence of a measles case in a child after a visit outside, twenty- six children developed measles. The secondary attack rate of measles is:

a. 25%
b. 40%
c. 50%
d. 65%

e. 66%

Key: True: e

102. In an epidemiological study the incidence of disease in females is more than that of males but the prevalence is equal in both. It indicates:

a. Case fatality is more in female
b. Mortality in male is higher
c. Disease is of less duration in males
d. Females harbour disease for longer duration
e. Males harbour disease for longer duration

Key: True: a

103. Which one of the following is the Odds ratio, calculated from the given data?

	Diseased	Un-diseased
Positive	30	20
Negative	20	30

a. 0.44
b. 1.5
c. 0.8
d. 2.25
e. 2.00

Key: True: d

104. A total of 300 newly diagnosed patients with laryngeal cancer are allocated to treatment with either surgical excision alone or surgical excision plus radiation treatment. What is the study design?

a. Case series report
b. Case-control study
c. Clinical trial
d. Cohort study
e. Case report

Key: True: c

105. An analysis of the race of patients who visit an emergency room reveals that 40% are white, 25% are black, 20% are Native American, and 15% are Asian. These data would best be depicted graphically with a

a. Venn diagram
b. Cumulative frequency graph
c. Normal curve
d. Histogram
e. Pie chart

Key: True: e

106. A study was conducted in America to find out the proportion of blacks and white Americans in California. This variable chosen is:
   a. Nominal
   b. Ordinal
   c. Continuous
   d. Discreet numerical
   e. Dichotomous

Key: True: e

107. A public health physician wants to study the load of hypertension in Rawalpindi district to establish special screening & treatment services in the mentioned area. Which design is more useful for this?
   a. Cross sectional
   b. Case series
   c. Cohort
   d. Case control
   e. Experimental

Key: True: a

108. Japan has a high rate of stomach carcinoma and a low rate of colon carcinoma than the U.S. Which study would you suggest to prove or support the environmental effect on the incidence of these cancers?
   a. Migrant studies
   b. Case control
   c. Incidence
   d. Case reports
   e. Mortality survey

Key: True: a

109. To give the relevant importance to hypertension control in a health service a researcher wants to study the prevalence of hypertension. He chose a cohort study. The design to assess prevalence is?
   a. Inappropriate
   b. Suitable
   c. Quick
   d. Feasible
   e. Expensive

Key: True: a

110. A researcher wants to study natural history of silicosis in a population of industrial workers. Which design is most useful?

a. Cross sectional
b. Case report
c. Case control
d. Incidence
e. Ecological survey

Key: True: d

111. If a researcher wants to study precedence relationship between the exposure and effect, which design should he prefer?
a. Descriptive survey
b. Ecological survey
c. Case series
d. Cross sectional
e. Cohort

Key: True: e

112. Smokers have risk of lung cancer four times more than non smokers. If smoking indicates causal association this characteristic gives:
a. Specificity
b. Strength of association
c. Coherence
d. Consistency
e. Temporal sequence

Key: b

113. The incidence of gonorrhoea is continuously increasing in a particular locality. An investigator reveals that mostly sex workers are living there. This epidemic may be classified as:
a. Common source single exposure
b. Common source continuous exposure
c. Propagated epidemic
d. Slow epidemic
e. modern epidemic

key: b

114. A public health physician wants to study the load of hypertension in Rawalpindi district to establish special screening & treatment services in the mentioned area. Which design is more useful for this?
a. Cross sectional
b. Case series
c. Cohort
d. Case control
e. Experimental

Key: a

115. In a prospective study of the relationship between oral contraceptive use and the subsequent risk of developing heart disease, a cohort of 1000 women were followed for 5 years. The results were as follows:

	Present	Absent
	A 245	B 75
	C 50	D 630

A + C = 295 B + D = 705 n = 1000

What is the incidence rate (absolute risk) of endometrial cancer among those who didn't use oral contraceptives?

a. 630 / (50 + 630)
b. 75 / (245 + 75)
c. 50 / (50 + 630)
d. 245 / (245 + 75)
e. 680/(320+680)

Key: True: c 50/(50 + 630)

116. 10 cases of food poisoning had been reported in hospital, 2 out of these developed mild gastrointestinal symptoms, 4 developed moderate dehydration but recovered and 2 succumbed to the disease. The characteristic of the organism of food poisoning that produces the severest form of the disease is:

a. Infectivity
b. Pathogenicity
c. Virulence
d. Communicability
e. Resistibility

Key: c

117.Different students have proved that prevalence of Alzheimer's disease increase with increasing population ages. Other aspects of descriptive epidemiology proves low incidence in Native Americans. Which contributing factor is more common in the above disease based on the scenario:

a. Genetic
b. Geographic distribution
c. Diet
d. Health coverage
e. Ethinicity

1. Incidence of prostate carcinoma is much lower in Japan than US. First generation of migrants from Japan to US also have relatively low incidence rates but the rates increase successively in subsequent generation this supports effect of :

2. a. Temporal variation
3. b. Genetics
4. c. Environment
5. d. Nutrition
6. e. Stress

119. The incidence of gonorrhoea is continuously increasing in a particular locality. An investigator reveals that in that area mostly sex workers are living. This epidemic may be classified as:

a. Common source single exposure
b. Common source continuous exposure
c. Propagated epidemic
d. Slow epidemic
e. modern epidemic

key: b

120. In Rawalpindi general hospital during the month of December, a total of 10 patients were admitted with diagnosis of meurngococcal meningitis. The total inpatients in that month were 800. What is the incidence rate of meningocacal meningitis for the month of December?

a. 11.5 / 1000
b. 12.5 / 1000
c. 13.0 / 1000
d. 9.0 / 1000
e. 10.5 / 1000

Key: b

SCREENING

1. The yield of a screening programme by a field test increased over a period of 3 years although the trade off between sensitivity and specificity remained the same. It gives a clue to an increase in;

a. Validity
b. Accuracy
c. Prevalence
d. Incidence
e. Reliability

Key: True: c

2. A woman came with antepartal bleeding. She was to be transfused with blood. Her blood was sent for blood grouping and HBV screening. She was found to be HB positive. This screening is;

a. Multiphasic
b. Targeted
c. Research
d. Mass

e. Opportunistic

Key: True: e

3. Worker of lead foundry are tested for corpoporphyrin in the urine. This screening is:
   a. Multiphasic
   b. Targeted
   c. Research
   d. Mass
   e. Opportunistic

Key: True: b

4. For screening of tuberculosis mantoux, chest x-rays and sputum analysis were used on the same occasion in Rawalpindi District. This screening is an example of:
   a. Multiphasic
   b. Targeted
   c. Research
   d. Mass
   e. Opportunistic

Key: True: a

5. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

		Clinical Depression		
		Present	Absent	
Test	+	12	18	(12+18)
	-	28	42	(28+42)
		(12+28)	(18+42)	N = 100

What will be the sensitivity?
   a. 30 %
   b. 40 %
   c. 54 %
   d. 60 %
   e. 70 %

Key: True: a

6. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

		Clinical Depression		
		Present	Absent	
	+	12	18	(12+18)

Test

-	28	42	(28+42)
	(12+28)	(18+42)	N = 100

What will be the specificity?

a. 30 %
b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: e

7. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

	Clinical Depression		
	Present	Absent	
+	12	18	(12+18)
Test			
-	28	42	(28+42)
	(12+28)	(18+42)	N = 100

What will be Positive predictive value?

a. 30 %
b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: b

8. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

	Clinical Depression		
	Present	Absent	
+	12	18	(12+18)
Test			
-	28	42	(28+42)
	(12+28)	(18+42)	N = 100

What will be the Negative predictive value?

a. 30 %
b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: d

9. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

		Clinical Depression		
		Present	Absent	
Test	+	12	18	(12+18)
	-	28	42	(28+42)
		(12+28)	(18+42)	N = 100

What will be the False-positive rate?

a. 30 %
b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: a

10. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

		Clinical Depression		
		Present	Absent	
Test	+	12	18	(12+18)
	-	28	42	(28+42)
		(12+28)	(18+42)	N = 100

What will be the False-negative rate?

a. 30 %
b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: e

11. An investigator evaluated 100 patients suffering from major depression as confirmed by the attending psychiatrist. The results were as follows:

		Clinical Depression		
		Present	Absent	
Test	+	12	18	(12+18)
	-	28	42	(28+42)
		(12+28)	(18+42)	N = 100

What will be the Accuracy of a test?

a. 30 %

b. 40 %
c. 54 %
d. 60 %
e. 70 %

Key: True: c

12. The extent to which a test measures what it was originally designed to measure is described as:
    a. Sensitivity
    b. Specificity
    c. Validity
    d. Reliability
    e. True-positive value

Key: True: c

13. Accuracy of the screening test will depend upon:
    a. Validity
    b. Systemic error
    c. Reliability
    d. Random error
    e. Precision

Key: True: a

14. A pap smear and colposcopic examination for the early detection of cervical cancer and papilloma virus infection constitute.
    a. Primary prevention
    b. Secondary prevention
    c. Tertiary prevention
    d. Medical treatment
    e. Surgical treatment

Key: True: b

15. With X representing the most accurate cutoff point for a diagnostic screening test, what does D represent:

a. False positives
b. True positives
c. False negatives
d. True negatives
e. Skewed distribution

Key: True: a

16. The results of screening test for diabetes in a sample of 1000 people are as under:

400	50
50	500

What is the positive predictive value of this test?

a. 70%
b. 88%
c. 68%
d. 48%
e. 90%

Key: b

17. After excision of breast for Ca breast, a surgical reconstruction of breast tissue was done. This reflects:

a. Primary prevention
b. Secondary prevention
c. Tertiary prevention
d. Medical treatment
e. Surgical treatment

Key: c

18. A screening test is positive in the majority of cases but false positive rate is much higher than true positives this indicates:

a. Low PPV
b. Low NPV
c. Low accuracy
d. High validity
e. High specificity

Key: a

19. For a given sensitivity and specificity the positive predictive value will be more if the disease under consideration has

a. High prevalence
b. Shot carrier state
c. High incidence

d. Short duration
e. High fatality

20. When we move from one population to another population to screen a given disease. We expect a change in:
a. Sensitivity
b. Specificity
c. Validity
d. Accuracy
e. Predictive value

21. It the positive predictive value of a test is higher it will indicate:
a. Low prevalence
b. Low negative predictive value
c. Low sensitivity
d. High specificity
e. Low accuracy

BIOSTATISTICS

1. A study was conducted in America to find out the proportion of blacks and white Americans in California. This variable chosen is:
a. Nominal
b. Ordinal
c. Continuous
d. Discreet numerical
e. Dichotomous

Key: True: e

2. The median of the following data, is: 1,2,4,6,8,10,11,13
a. 6
b. 8
c. 7
d. 10
e. 9

Key: True: c

3. A household survey of 10 families was conducted by students of 4th year MBBS, Wah Medical College. In the collected data, the ages of heads of families were: 32, 34, 35, 36, 36, 42, 44, 46, 48, and 52. The mean age of heads of families is
a. 36
b. 38.5
c. 40
d. 40.5

e. 42

Key: True: d

4. A nutritional research team followed serum levels of vitamin B_{12} in 120 children for three years to determine the association between cyanocobalamin deficiency and the subsequent risk of developing Megaloblastic anemia. The results were as follows:

VITAMIN B_{12} LEVELS

Mean	260 pg/mL
Median	226 pg/mL
Mode	194 pg/mL

From the data, it can be concluded that this distribution is:

a. Normal
b. Negatively
c. Positively skewed
d. Bimodal
e. Multimodal

Key: True: c

5. Serum cholesterol levels for two groups of Americans were recorded in 1989. The mean cholesterol levels of the two groups were compared. To determine whether the measurements were significantly different or not, the most appropriate statistical test would be:

a. Chi-square test
b. Correlation analysis
c. F test (ANOVA)
d. Student's *t* test
e. Regression analysis

Key: True: d

6. In a descriptive study the mean is 220 and the standard error is 10, the 95 confidence limits would be:

a. 210 to 230
b. 215 to 225
c. 200 to 240
d. 220 to 230
e. 205 to 235

Key: True: c

7. For a survey, a village is divided into 5 lanes, each lane is sampled randomly. It is an example of:

a. Simple random sampling
b. Standard random sampling
c. Systematic random sampling
d. Cluster random sampling

e. Quasi random sampling

Key: True: d

8. The birth weights in a hospital are to be presented in a graph. This is best done by a:
   a. Bar diagram
   b. Pie chart
   c. Histogram
   d. Pictogram
   e. Frequency chart

Key: True: c

9. An analysis of the race of patients who visit an emergency room reveals that 40% are white, 25% are black, 20% are Native American, and 15% are Asian. These data would best be depicted graphically with a
   a. Venn diagram
   b. Cumulative frequency graph
   c. Normal curve
   d. Histogram
   e. Pie chart

Key: True: e

10. If six families were surveyed and the numbers of children per family were found to be 2, 3, 4, 4, 5, 6, fine the mean number of children per family
   a. 2
   b. 3.5
   c. 4
   d. 6
   e. 4.5

Key: True: c

11. If, in one of the groups of premature infants, the maximum value for hexosaminidase A was substituted with a much higher value. The value which is unlikely to be affected by this higher value is:
   aVariance
   a. Range
   b. Standard deviation
   c. Median
   d. Mean

Key: True: d

12. A nutritional research team followed serum levels of vitamin B_{12} and folic acid in 125 children for five years to determine the association between cyanocobalamin deficiency and the subsequent risk of developing megaloblastic anemia. The results were as follows:

VITAMIN B_{12} LEVELS

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Median	228 pg/mL
Mode	196 pg/mL

From the data, it can be concluded that this distribution is

a. Normal
b. Positively skewed
c. Negatively skewed
d. Skewed toward the left
e. Unable to be identified

Key: True: b

13. In study carried out in the hospital ward, every 10^{th} admitted patient was included in the sample, which sampling procedure is this:

a. Random sampling
b. Stratified sampling
c. Quota sampling
d. Convenient sampling
e. Systematic sampling

Key: True: e

14. Three groups of subjects were followed over the course of five years to compare treatments for sideroblastic anemia. The most appropriate statistical analysis to determine the quantitative serologic differences resulting from these treatments would be a(n)

a. Regression analysis
b. F test (ANOVA)
c. Correlation analysis
d. Chi-square test
e. T test

Key: True: b

15. In a class of 134 medical students, the mean systolic blood pressure was found to be 126 mm Hg with a standard deviation of 6 mm Hg If the blood pressures in this sample are normally distributed, what portion of the medical students will have systolic blood pressures above 132 mm Hg?

a. 0.5%
b. 2.5%
c. 5%
d. 16%
e. 32%

Key: True: d

16. In a household survey conducted on ten families the frequency of family members in different age groups was less than 5 years ➔ 21, 5 – 14 years ➔ 16, 15 – 64 years ➔ 77 & > 65 years ➔ 1. The relative frequency of members in 15 – 64 years age group would be:

a. 60.5%
b. 67.5%
c. 70.5%
d. 76.5%
e. 80.5%

Key: True: b

17. Malaria cases were reported throughout the world during the year 1971 – 1978 excluding African region. These cases can be best represented by:

a. Frequency polygon
b. Histogram
c. Line diagram
d. Pictogram
e. Scatter diagram

Key: True: c

18. There are 50 individual in population and they have same hemoglobin level that is 14g/dL. As there is no variability, the standard deviation will be:

a. 0
b. 1, -1
c. 0, 1
d. +2
e. -2

Key: True: a

19. A mean hemoglobin level of 100 women in a population sample is 12g/dL with standard deviation of 2. The confidence interval for the population mean would be:
    a. 10.4 – 11.6
    b. 11.6 – 12.4
    c. 12.4 – 13.6
    d. 13.6 – 14.4
    e. 14.4 – 15.6

Key: True: b

20. The students of Wah Medical College visited Nasheman School. The numbers of students per class from class I to class IX were as follows:
    27, 23, 15, 18, 30, 24, 8, 12 and 16. The median number in this series is:
    a. 12
    b. 15
    c. 16
    d. 18
    e. 23

Key: True: d

21. In a village of 300 population, 60% constitute Hindus, 20% Muslims, 10% Sikhs and 10% Christians. We want to take a sample of 10% of the population to study the eating habits of this population. The best method would be:
    a. Simple random sampling
    b. Stratified random sampling
    c. Systematic random sampling
    d. Non-random sampling
    e. Cluster sampling

Key: True: b

22. The median of a series of 20 observations is 10, mean is 11.5 and mode is 11, which of the following measures can be subjected to statistical manipulation:
    a. Sample size
    b. Mean
    c. Median
    d. Mode
    e. Range

Key: True: b

23. Which of the following can have more than one value?
    a. The mean
    b. The range
    c. The mode

d. The median
e. Standard deviation.

Key: True: c

24. The distribution of heights of the girls in Wah Medical College was plotted. The most frequent value was 5' – 2", which gives a single most important clue to its:
a. Negative skewness
b. Positive skewness
c. Normal distribution
d. Large standard deviation
e. Multi modal distribution

Key: True: c

25. A large study of bladder cancer and cigarette smoking produced the following data:

INCIDENCE OF BLADDER CANCER (per 100,000 males per year)	
Cigarette smokers	48.0
Non-smokers	25.4

The relative risk of developing bladder cancers compared with non-smokers is:
a. Categorical variable
b. Ordinal data
c. Numerical, continuous variable
d. Numerical, discrete variable
e. Proportion

Key: True: c

26. Birth rates of a population of infants at 40 weeks gestational age are approximately normally distributed, with a mean of 3000 grams. Roughly 68% of such infants weigh between 2500 and 3500 at birth. If a sample of 100 infants was studied, the standard error would be
a. 50
b. 100
c. 200
d. 250
e. 500

Key: True: a

27. When the standard for accepting the difference was at P-value of 0.05 and the calculated value was 0.01, the null hypothesis was rejected by the researcher. What do you think of results?
a. Wrongly rejected
b. Significant difference
c. No difference

d. Alternate hypothesis is wrong
e. Sample size was small

Key: True: b

28. A study was conducted to assess the heights of 30 students . By chance all of the students were found to be of the same height. The standard deviation of this study sample is:
a. Zero
b. 0 ── -1
c. 0 ── +1
d. 0 ── +2
e. 0 ── -2

Key: True: a

29. In the Medical OPD of teaching hospital of Wah Medical College, Wah Cantt, diastolic blood pressures of 10 patients were as follows:
80, 75, 81, 79, 71, 95, 75, 77, 84, & 90. The mean of this data is:
a. 80
b. 81
c. 82
d. 83
e. 84

Key: True: b

30. A normal distribution curve is based mainly on:
a. Mean and sample size
b. Mean and standard deviation
c. Range and sample size
d. Range and standard deviation
e. Mean and range

Key: True: b

31. The relative frequency of a class is obtained by:
a. Dividing the frequency of that class by the sum of all frequencies
b. Multiplying the frequency of that class by 100
c. Dividing the frequency of that class by 100
d. Dividing the sum of frequencies by 100
e. Dividing the frequency of that class by the sum of all frequencies and multiplied by 100

Key: True: e

32. A study was conducted to assess the height of students of 4th year in 10 Medical colleges the values of heights ranged between 5.5 – 5.10 feet. A histogram has been selected by the researcher to present these results as it is a:

a. Nominal data
b. Categorical data
c. Both qualitative and quantitative data
d. Continuous data
e. Discrete numerical data

Key: True: d

33. A study was conducted to assess the height of students of 4th year in 10 Medical colleges. The values of heights ranged between 5.5 – 5.10 feet. Which graph should be used by the researcher to present the obtained data?

a. Bar chart
b. Histogram
c. Pie chart
d. Scatter diagram
e. Line graph

Key: True: b

34. The median of the following data, is: 1,2,4,6,8,10,11,13

a. 6
b. 8
c. 7
d. 10
e. 9

Key: True: c

35. A large study of bladder cancer and cigarette smoking produced the following data:

INCIDENCE OF BLADDER CANCER (per 100,000 males per year)	
Cigarette smokers	48.0
Non-smokers	25.4

The relative risk of developing bladder cancers compared with non-smokers is:

a. Categorical variable
b. Ordinal data
c. Numerical, continuous variable

d. Numerical, discrete variable
e. None of the above

Key: True: c

36. Formula for chi square value is:
a. $\frac{O - E}{E}$
a. $\frac{O - E}{E^2}$
a. $\frac{(O - E)^2}{N}$
a. $\frac{\Sigma(O - E)^2}{E}$
a. $\frac{(O - E)^2}{E}$

Key:

37. The median of the following data, is:
1, 2, 4, 6, 8, 10, 11, 13
a. 6
b. 8
c. 7
d. 10
e. 5

Key: True: c

38. After arranging the data is ascending or descending order of magnitude, the value of middle observation:
a. Mean
b. Mode
c. Median
d. Geometric mean
e. Mean deviation

Key: True: c

39. The area between two standard deviations on either side of the mean ($X \pm 2S.D$) will include approx how much values in the distribution?
a. 68%
b. 95%
c. 99.7%
d. 100%
e. 90%

Key: True: b

40. Following test of significance will be used when more than two groups are to be compared?
    a. "t" test
    b. Chi-square test
    c. Z-test
    d. Standard error of proportion
    e. Standard error of mean

Key: True: b

41. If the mean cholesterol value of a group of normal subjects is 230 mg% with a standard error of 20. The 95% confidence limit for the population is:
    a. 220-240
    b. 210-250
    c. 200-260
    d. 190-270
    e. 180-280

Key: True: d

42. Birth rates of a population of infants at 36 weeks gestational age are approximately normally distributed, with a mean of 2500 grams. Roughly 95% of such infants weigh between 1900 and 3100 grams at birth. If a sample of 225 infants was studied the standard error would be:
    a. 10
    b. 20
    c. 30
    d. 40
    e. 50

Key: True: b

43. In Wah Medical College there are 86 students in final year, 102 in fourth year, 106 in Third year, 104 in second year and 100 in first year. The relative frequency of fourth year students would be:
    a. 5.5%
    b. 10.5%
    c. 15.5%
    d. 20.5%
    e. 25.5%

Key: True: d

44. The distribution of height of the girls in Wah University was plotted. The most frequent value was five feet and two inches, while mean height was five feet and eight inches. This show:
    a. Negative skewness

b. Positive skewness
c. Normal distribution
d. Large standard deviation
e. Multimodal distribution

Key: True: b

45. A household survey of 10 families was conducted by students of 4th year MBBS, Wah Medical College. In the data they collected, the ages of heads of families were: 32,32,36,48,34,46,35,44,36 and 32 years. The mode in this series:
    a. 32
    b. 34
    c. 36
    d. 44
    e. 46

Key: True: a

46. In the Medical OPD of teaching hospital of Wah Medical College, Wah Cantt, diastolic blood pressures of 10 patients were as follows:
    80, 75, 81, 79, 71, 95, 75, 77, 84, & 90. The mean of this data is:
    a. 80
    b. 81
    c. 82
    d. 83
    e. 84

Key: True: b

47. An investigator gets a positively skewed data on account of having only a small number of simple numerical observations at extremely high values. It will give an over estimate of:
    a. Mean
    b. Median
    c. Mode
    d. Correlation
    e. Modal class

Key: True: a

48. An investigator gets a positively skewed data on account of having only a small number of simple numerical observations at extremely high values. Which measure of central tendency should he select if data is numerical?

a. Mean
b. Median
c. Mode
d. Geometric mean
e. Modal class

Key: True: b

49. When a relationship between the heart rate and valsalva's ratio is studied, mean is useful but dispersion of the data is also very useful. Which method of spread will be more useful in this?
a. Range
b. Standard deviation
c. Coefficient of variance
d. Percentage
e. Inter quatile range

Key: True: c

50. In a descriptive study the mean is 200 and the standard error is 5, the 95 confidence limits would be:
a. 180 to 200
b. 190 to 200
c. 180 to 210
d. 200 to 220
e. 190 to 210

Key: e

51. An analysis of the race of patients who visit an emergency room reveals that 40% are white, 25% are black, 20% are Native American, and 15% are Asian. These data would best be depicted graphically with a
a. Venn diagram
b. Cumulative frequency graph
c. Normal curve
d. Histogram
e. Pie chart

Key: True: e

52. An investigator gets a positively skewed data on account of having only a small number of simple numerical observations at extremely high values. It will give an over estimate of:
a. Mean
b. Median
c. Mode
d. Correlation
e. Modal class

Key a

53. In a household survey conducted on ten families the frequency of family members in different age groups was less than 5 years ➔ 21, 5 – 14 years ➔ 16, 15 – 64 years ➔ 77 & > 65 years ➔ 1. The relative frequency of members in 15 – 64 years age group would be:

a. 47%
b. 57%
c. 67%
d. 77%
e. 87%

Key: b

PHC

1. Your advice is sought to maintain sustainability of a health programme. Which is the best and essential feature that you suggest to make the programme sustainable?

a. Community participation
b. Cost effectiveness
c. Cost analysis
d. Intersectoral collaboration
e. Equality

Key: True: a

2. The water and power development and public health engineering are the two areas which are working with the health department for control of diahrroeal and gastrointestinal diseases in Rawalpindi District, which is an example of:

a. Equity
b. Equality
c. Sustainability
d. Appropriate technology
e. Intersectoral collaboration

Key: True: e

3. Infant mortality was studied at one place by three different investigators / researchers. It was found that they all gave the similar figures. This quality of a measurement is referred as:

a. Sensitivity
b. Subjectivity
c. Specificity
d. Objectivity
e. Accuracy

Key: True: d

4. There was an epidemic of cholera in a village of Bangladesh. It was followed by increase in deaths mainly among children and eventually an increase in infant mortality rate. This quality of IMR to change with changes in mortality trends is:
   a. Sensitivity
   b. Objectivity
   c. Specificity
   d. Validity
   e. Accuracy

Key: True: a

5. A community survey was done to assess the health needs of community, community demanded more schools, sanitary water supply and sewage disposal. The surveyors recommended building of sanitary wells and bore-hole latrines straight away to decrease the incidence of diarrhoeal diseases. The provision of schools was delayed for a few reasons. This step by the health care providers is known as:
   a. Prioritization
   b. Equity
   c. Equality
   d. Leadership
   e. Health promotion

Key: True: a

6. About 75% of population in Pakistan resides in rural areas and the remaining in peri-urban and urban areas, while the allocated funds for improvement of health care programmes are more for urban areas. This is an example of:
   a. Inequality
   b. Inequity
   c. Prioritization
   d. Resource generation
   e. Sustainability

Key: True: b

7. For providing quality health services, community participation plays an essential role. To ensure maximum community participation, which level of health care system should be strengthened?
   a. Primary health care
   b. Secondary health care
   c. Tertiary health care
   d. 1st level referral facility
   e. Higher level referral facility

Key: True: a

8 Pakistan was a signatory to "Health for All" concept and it adopted the PHC approach in 1978 to achieve the goals of HFA by the year 2000. The health infrastructure was developed and human resource inducted. Keeping in mind the health scenario of Pakistan, which aspect is the most critical in achieving the desired objective of health for all?

a. Money
b. Community health workers
c. Leadership in health care
d. Computer network
e. Research

Key: True: c

9. To suit the rural situation in Pakistan the lady health visitor introduced a home made fluid for oral rehydration. It will be described as:

a. Community participation
b. Feasibility
c. Suitability
d. Equity
e. Appropriate technology

Key: True: e

10. To achieve the objective of HFA the most crucial aspect which was missing in the implementation of PHC program in Pakistan was:

a. Leadership
b. Registration system
c. Monitoring
d. Evaluation
e. Prioritization

Key: True: a

11. To improve the health of the nations, "The Millennium Development Goals" are mainly focused on:

a. Women education
b. Involvement of men in RH
c. Fertility regulation
d. HMIS
e. Health system research

Key: True: a

12. Government of Pakistan started a program of safe water supply to people as part of water & sanitation decade 1981-91 in order to improve their health. Many poverty alleviation schemes were also implemented to ensure economic stability and health. This reflects:

a. Intersectoral collaboration
b. Equality
c. Equity
d. Appropriate technology
e. Efficiency

Key: True: a

13. The effectiveness of an intervention will depend primarily on:
a. Equity
b. Equality
c. Money
d. Comprehensiveness
e. Planning & management

Key: True: a

14. Information, Ministry of Food & Agriculture, Ministry of Law and Ministry of Religious affairs should cooperate and coordinate to play their role for prevention of Iodine deficiency disorders. This reflects:
a. Multi sectoral approach
b. Equity
c. Equality
d. Appropriate technology
e. Efficiency

Key: True: a

15. In order to improve the MCH services Government of Pakistan has started a program of training of lady health workers and trained birth attendants. They are selected by local committee and trained locally. By overcoming cultural and communication barriers, they provide primary health care in ways that are acceptable to the community. It shows:
a. Equality
b. Equity
c. Efficiency
d. Community participation
e. Intersectoral coordination

Key: True: d

16. In 1978 a global immunization program EPI was started to vaccinate the children against six vaccine preventable diseases e.g TB, Polio, Diphtheria, Pertusis, Tetanus and Measles. It was specifically designed to control morbidity and mortality among children. This reflects:
a. Selective approach
b. Holistic approach to child health
c. Comprehensive PHC
d. Equality

e. Inter sectoral approach

Key: True: a

17. For eradication of Polio, the polio eradication campaign was started in 1992. Since then several NIDs and SNIDs have been conducted. Polio has almost been eradicated now. This program of immunization is based on:
    a. Equity and appropriate technology
    b. Comprehensive PHC
    c. Leadership & Community participation
    d. Equity and Equality
    e. Community participation

Key: True: a

18. A good manager is the one who sees to the things and ensures correct way of doing things. If he ensures low wastage of resources he is:
    a. Effective
    b. Efficient
    c. A monitor
    d. A decision maker
    e. Supervisor

Key: True: b

19. A 20 years old boy had a head injury in a motor bike accident. His attendant took him to a general practitioner first who advised them to take him to POF hospital, Wah Cantt immediately because Advanced Trauma Life Support is available there only. The level of health care provided by POF hospital in this case is:
    a. Primary
    b. Secondary
    c. Tertiary
    d. First level referral facility
    e. First level care facility

Key: True: c

20. An LHV in a BHU of a remote area examined a primigravida at 22 weeks of gestation. Her B.P was 170/100. In order to have proper antenatal assessment and to prevent complications of pregnancy induced hypertension. The first level referral should be to:
    a. BHU
    b. THQ
    c. DHQ
    d. Teaching hosp[ital
    e. Specialized maternity clinic

Key: True: b

21. According to a study conducted by WHO, 3 new cases of polio are found in interior Sindh in year 2007 despite the success of anti polio campaign. None of the children under 5 years of that village was given polio drops because parents had to travel for 1 and 1/2 hour on foot to reach the BHU to have polio drops. This incidence of polio is due to lack of:
    a. Effectiveness
    b. Efficacy
    c. Acceptability
    d. Accessibility
    e. Affordability

Key: True: d

22. A woman traveled a long way from a remote village & came to a population welfare centre/family planning centre. She had enough money but was very tired on account of traveling. When she went inside, she found a male doctor dealing with the clients. She decided to go back. The most likely reason for this decision is lack of:
    a. Acceptability
    b. Affordability
    c. Accessibility
    d. Efficacy
    e. Effectiveness

Key: True: a

23. The Northern areas of Pakistan are the recognized belts of endemic goiter, on account of Iodine deficiency. The Government of Pakistan decided to promote sale of Iodized salts in this area. This is an example of:
    a. Monitoring
    b. Decision making
    c. Equity
    d. Affordability
    e. Efficiency

Key: True: c

24. There was an out break of simple watery diarrhea among children in a village. The health care providers wanted to avoid unnecessary hospital admitions and started distributing ORS to people, who had young children. This reflects:
    a. Community participation
    b. Equality
    c. Sustainability
    d. Appropriate technology
    e. Intersectoral collaboration

Key: True: d

25. About 60% pregnant ladies in rural areas of Pakistan were found having anemia. It was decided to provide them with iron & folic acid supplements. This is an example of:
    a. Equality
    b. Equity
    c. Prioritization
    d. Community participation
    e. Situation Analysis

Key: True: b

26. A health team visited along with the community leaders and health workers, all the primary schools and mosques in a village to give polio drops during polio campaign. The community workers facilitated identification of houses with children less than five years of age. This reflects:
    a. Management
    b. Situation analysis
    c. Prioritization
    d. Community participation
    e. Intersectoral collaboration

Key: True: d

27. The pediatric OPD of POF hospital, Wah Cantt is dealing with 200 patients daily. This type of direct contact of patients with the health care provider makes the OPD of POF hospital particularly a:
    a. First level care facility
    b. Tertiary care hospital
    c. First level referral facility
    d. Higher level referral facility
    e. Special pediatric service outlet

Key: True: a

28. A high prevalence of Ca cervix was found to be there in one of the tribal area of Pakistan. It was planed to have free facility of pap smear taken in the concerned rural health centre to screen the local population for the particular cancer. The program showed a lot of resistance as it lacked:
    a. Accessibility
    b. Affordability
    c. Acceptability
    d. Effectiveness
    e. Equity

Key: True: c

29. Government of Pakistan started a program to set a free medical camp in Balakot especially in those areas affected by earthquake to provide medical care for the people to avoid transportation of patients to the hospital in the adjacent areas. This particular action to save additional expense on traveling is:
    a. Appropriate technology
    b. Suitability
    c. Equality
    d. Community participation
    e. Prioritization

Key: True: a

30. A village was reported to have a high incidence of diarrhea. Upon investigation it was found that people had to travel a long distance to fetch water from the river. The health care providers decided to build a small sanitary well, which was financially more feasible. This reflects:
    a. Appropriate technology
    b. Equality
    c. Efficiency
    d. Community participation
    e. Prioritization

Key: True: a

31. The effectiveness of an intervention will depend primarily on:
    a. Equity
    b. Equality
    c. Money
    d. Comprehensiveness
    e. Planning and management

Key a

32. To improve the health of the nations, "The Millennium Development Goals" are mainly focused on:
    a. Women education
    b. Involvement of men in RH
    c. Fertility regulation
    d. HMIS
    e. Health system research

Key: a

33. For providing quality health services, community participation plays an essential role. To ensure maximum community participation, which level of health care system should be strengthened?
    a. Primary health care
    b. Secondary health care

c. Tertiary health care
d. 1st level referral facility
e. Higher level referral facility

Key: a

Demography

1. In 2005, Pakistan crude birth rate was 36 births per 1000 population and the crude death rate was 9 deaths per 1000 population. What was the population growth rate of the country in that year assuming no in and out migrations?
   a. 2.9 %
   b. 2.8 %
   c. 2.7 %
   d. 2.6 %
   e. 2.5 %

Key: True: c

2. The changes in the size of population are indicated by five stages of demographic transition. Pakistan is currently in the:
   a. First stage
   b. Third stage
   c. Second stage
   d. Fourth stage
   e. Fifth stage

Key: True: b

3. The total number of people in a completed family can be estimated from:
   a. Net reproduction rate
   b. Gross reproduction rate
   c. Contraception prevalence rate
   d. Eligible couple rate
   e. Total fertility rate

Key: True: e

4. Population size is determined by fertility, mortality and migrations. A researcher concluded that Pakistan's population is increasing on account of high fertility which measure did he rely upon the most to conclude this?
   a. Growth rate
   b. Crude birth rate
   c. Natural increase rate
   d. Total fertility rate
   e. General fertility rate

Key: True: d

5. The number of daughters a new born girl will bear during her life time assuming fixed age specific fertility and mortality rate, refers to which one of the following?
   a. Age specific fertility rate
   b. Gross reproduction rate
   c. Net reproduction rate
   d. Total fertility rate
   e. General fertility rate

Key: True: c

6. In 1993 Burkina Faso had Gross reproductive rate of 3.5 while United Kingdom was only 0 .86 that means if 1993 Fertility levels were to continue, which one of the following options will be correct.
   a. The Net Reproductive Rate of Burkina Faso would definitely be more than 3.5
   b. In United Kingdom, a woman would produce more than one daughter on average during her life time.
   c. In Burkina Faso, a woman would produce 3.5 daughters on average through her life time
   d. The Net Reproductive Rate of UK will be more than one.
   e. The Net Reproductive Rate of Burkina Faso would be equal to Gross Reproductive Rate of the country

Key: True: c

7. The absolute number of population of an area at any point in time is:
   a. Count
   b. Rate
   c. Ratio
   d. Proportion
   e. Average

Key: True: a

8. If the total number of reported births in Rawalpindi district were 10,000 and deaths were 5,000 in the year 2007. By giving these figures we are referring to:
   a. Absolute numbers
   b. Crude birth rate
   c. Growth rate
   d. Crude death rate
   e. Vital index

Key: True: a

9. Many women in a country are educated, independent and they work for earning their lively hood too. When the number of males are expressed in relation with 100 females this is:
   a. Sex ratio

b. Sex rate
c. Dependency ratio
d. Literacy rate
e. Working women ratio

Key: True: a

10. When total number of live births are expressed against the total population at a given place and during a given period. We are referring:
a. General fertility rate
b. Crude birth rate
c. Total fertility rate
d. Specific birth rate
e. Gross reproductive rate

Key: True: b

11. Hameed, sara and samia were born in the same year, they were neighbors and very close friends too. It was just a coincidence that their parents also got married about the same time. The most likely reason for their admission in the same class is:
a. Birth cohort
b. Marriage cohort of parents
c. Friendship
d. Neighbour hood
e. School accessibility

Key: True: a

12. The population pyramid of United Arab emirates in 1995 is shown. Which of the following is seen in this:
a. In -migration of males
b. High fertility
c. High mortality
d. Better Female survival
e. Female predominance

Key: True: a

13. This is Panjgur district (less developed) population pyramid. Which is the most obvious in this.
a. Low fertility
b. Low mortality
c. Male migration after 20
d. Better male survival
e. High female literacy

Key: True: c

14. Keeping in mind the population pyramid of Pakistan. Which of the following features is most obvious?
    a. Population momentum
    b. Low migration
    c. Higher female mortality
    d. High literacy
    e. Increased life expectancy

Key: True: a

15. General fertility rate is a more refined measure than the birth rate because it relates births to the age sex group at risk of giving birth while defining general fertility rate the denominator consists of:
    a. Mid year total population of women
    b. Population of women above 15 years of age
    c. Population of women in child bearing age
    d. Population of unmarried women
    e. Total number of live births

Key: True: c

16. Fertility refers to the number of live births women have the best picture of how many children women are currently having is given by:
    a. Total fertility rate
    b. Age specific fertility rate
    c. General fertility rate
    d. A crude birth rate
    e. Net reproduction rate

Key: True: a

17. Fertility is affected by cultural social economic & health factors. These factors operate through other factors among them level of induced abortion is important. Abortion rate is used for its determination, the denominator used is:
    a. Number of abortions
    b. Number of women ages 15 – 49
    c. Number of live births
    d. Number of married women ages 45 – 49
    e. Total population

Key: True: b

18. Family planning connotes conception control to avoid pregnancy & abortion, but it includes efforts of couples to induce pregnancy. So family planning achievement is determined by a sensitive indicator which is:

a. Birth rate
b. General fertility rate
c. Age specific fertility rate
d. Abortion rate
e. General fertility rate

Key: True: c

19. Doubling time is another way of expressing population growth. If we suppose that growth rate of Poland remains constant at 0.08% population would be doubled in about.
a. 800 years
b. 870 years
c. 875 years
d. 880 years
e. 890 years

Key: True: c

20. Population study shows that it has five different stages. Pakistan is currently having decreased death rate and an increased birth rate, so we will place Pakistan in:
a. Stage I
b. Stage II
c. Stage III
d. Stage IV
e. Stage V

Key: True: b

21. Demographic cycle has five stages and each country is allotted a different stage according to its distribution of population. For examples if the death and birth rate of a country both are declining then we call it as:
a. High stationary
b. Early expanding
c. Late expanding
d. Low stationary
e. Declining

Key: True: c

22. The rate which is similar to gross reproduction rate but is always lower than it is depicted by average number of daughters a new born girl will bear during her lifetime assuming fixed age specific fertility & mortality rates. This is called as:
a. Total fertility rate
b. Total marital fertility rate
c. Net reproduction rate
d. General fertility rate

e. Replacement level fertility

Key: True: c

23. A demographer observed that birth rate and death rate of Pakistan is decreasing but birth rate is still more than death rate. What do you think in which phase of demographic transition does Pakistan currently exist?

a. High stationary
b. Late expanding
c. Early expanding
d. Declining
e. Low stationary

Key: b

24.

Country	1993 GRR	1993 NRR
Burkina Faso	3.50	2.41
United Kingdom	0.86	0.85

Keeping in mind the above figures about Burkina Faso (BF) and United Kingdom (UK) which interpretation is correct:

a. Low mortality in BF
b. Low mortality in UK
c. High fertility in UK
d. Better education in BF
e. Replacement level fertility in BF

key: b

25. Many women in a country are educated, independent and they work for earning their lively hood too. When the number of males are expressed in relation to 100 of these females this is:

a. Sex ratio
b. Sex rate
c. Dependency ratio
d. Literacy rate
e. Working women ratio

Key: a

26. The number of children in 0 to 4 years of age per 1000 women of child bearing age (15 – 49 years) is defined as:

a. General fertility rate
b. Total fertility rate
c. Gross reproduction rate
d. Net reproduction rate
e. Child woman ratio

Key: e

27. A researcher observed that birth rate and death rate of Pakistan is decreasing but birth rate is still more than death rate. What do you think in which phase of demographic transition Pakistan exist:

a. High stationery
b. Late expanding
c. Early expanding
d. Declining
e. Low stationary

Key: b

28. In Pakistan, demographers are of the view that the goal of net reproduction rate should be equal to 1. They suggest that to achieve this goal family planning practices should be adopted by:

a. 45% couples
b. 50% couples
c. 60% couples
d. 55% couples
e. 65% couples

Key: c

Reproductive Health

1. A 14 week pregnant lady came to Gynae O.P.D with no specific complaints but to inquire about her additional requirements during this period. She was already taking 500mg of calcium, 40mg of iron and 0.5mg of folic acid in combination. The comment of gynecologist on her present intake of micronutrient is?

a. Excess of iron
b. Less folic acid
c. Adequate calcium and iron
d. Less calcium
e. Less iron in folic acid

Key: True: d

2. The incidence of induced abortion is more among married women of Dhok Ratta Rawalpindi. Keeping in mind the reproductive health services of Pakistan, the most likely reason for these abortions is:

a. Illegitimacy
b. Unwanted pregnancies
c. Anemia
d. Under nourished females
e. Infections

Key: True: b

3. A weight conscious pregnant woman wants information about her requirement of calories per day during pregnancy. You suggest an increase of:

a. 250 kcal

b. 450 kcal
c. 350 kcal
d. 550 kcal
e. 650 kcal

Key: True: c

4. A woman reports for vaccination against tetanus only 25 days before delivery; she has not received the first dose. What will you do?
a. Give anti tetanus immunoglobulin
b. Give two doses of tetanus toxoid with 2 weeks interval
c. Advise appropriate antibiotic course during delivery
d. Give one dose of tetanus toxoid and advice the second dose after delivery
e. Advise passive immunization after delivery

Key: True: d

5. A woman in the seventh month of pregnancy reports to you in the antenatal clinic for the first time. The recommended immunization is by:
a. Tetanus toxoid
b. Hepatitis B vaccine
c. Rubella vaccine
d. Pneumococcal vaccine
e. Tetanus immunoglobulin

Key: True: a

6. A 30 years old woman fitted with an IUCD comes for post insertional examination and complains of vaginal bleeding; which of the following is the least important to look for in this patient:
a. Break through vaginal bleeding
b. Hypermenorrhea
c. Pelvic infection
d. Dysmenorrhea
e. Endometrial cancer

Key: True: e

7. A 52 year old post menopausal woman who had never been able to conceive presented with anorexia, weight loss, nausea, abdominal discomfort, bloating, fullness, and no history of bleeding per vagina. She had a positive family history of gynaecologic cancer on pelvic examination; it was possible to feel a pelvic mass. The suspicion of a malignancy should focus upon which one of the following sites?
a. Ovary
b. Tube
c. Endometrium
d. Cervix of vagina

e. Nongynecologic organ

Key: True: a

8. One year old child comes to emergency with history of watery diarrhea for the last 24 hours. A house physician reports his impalpable pulse and un- recordable blood pressure. The first immediate step in emergency is to advise:

a. I/V Ringer's lactate
b. Oral rehydration therapy
c. I/V antibiotics
d. Stool examination
e. Urgent blood complete picture

Key: True: a

9. 30 years old married woman was advised X-Ray abdomen. To prevent radiation hazard to the baby in this woman, the doctor should take history of:

a. Hypersensitivity to radiation
b. Menstrual cycle
c. Previous exposure to X-Ray
d. Previous abortions
e. Genetic history

Key: True: b

10. A mother brought her six months old child to a BHU. She is worried about the growth of her child. The best single measure for assessing the physical growth in this age is:

a. Weight for age
b. Height for age
c. Chest circumference
d. Mid upper arm circumference
e. Head circumference

Key: True: a

11. A women delivers a baby boy at term with down's syndrome. The most likely cause is:

a. An extra chromosome 21
b. No 2nd sex chromosome
c. Phenotypic effect only
d. Extra y chromosome
e. Oligo-spermia

Key: True: a

12. A primigravida of 34 years had a normal vaginal delivery in a hospital. During the antenatal period she was labeled as hypertensive. She had a first stage of labour for 5 hours. She had a post partum hemorrhage, the likely cause of which was:
    a. Primary gravidity
    b. Age of the mother
    c. Hypertension
    d. Long 1st stage
    e. Untrained birth attendant

Key: True: c

13. The policy of delaying marriage of girls till 20 years of age belongs to:
    a. Primordial prevention
    b. Primary prevention
    c. Secondary prevention
    d. Disability limitation
    e. Rehabilitation

Key: True: a

14. To prevent neonatal tetanus by TT injections during pregnancy is the:
    a. Primordial prevention
    b. Primary prevention
    c. Secondary prevention
    d. Disability limitation
    e. Rehabilitation

Key: True: b

15. Antenatal service for detection of diseases which may lead to complications in pregnancy is an example of:
    a. Primordial prevention
    b. Primary prevention
    c. Secondary prevention
    d. Disability limitation
    e. Rehabilitation

Key: True: c

16. Management of deep vein thrombosis to arrest the progression of the disease is:
    a. Primordial prevention
    b. Primary prevention
    c. Secondary prevention
    d. Disability limitation
    e. Rehabilitation

Key: True: d

17. Use of oral contraceptives by women smokers over 35 years of age is associated with increased risk of:
    a. Cervical cancer
    b. Breast carcinoma
    c. Chronic bronchitis
    d. Coronary heart disease
    e. Peripheral neuropathy

Key: True:

18. A forty years old woman presents with an ovarian cyst; you want to screen her for breast cancer before suggesting any hormonal treatment. What will you advise?
    a. Chest radiograph
    b. Mammography
    c. Biopsy of breast
    d. Blood levels of progesterone
    e. Tumor markers

Key: True:

19. A child of 1 year presents with muscle wasting, loss of subcutaneous fat with no signs of edema and weight below 60% of WHO standard. The mother gives history of not giving enough proteins and other nutrients to the child after six months of age. The likely diagnosis is:
    a. Kwashiorkor
    b. Marasmus
    c. Marasmus & kwashiorkor
    d. Under nutrition
    e. Vitamin B_1 deficiency

Key: True:

20. A woman reports at a health facility with labour pains at term. She is suffering from chicken pox. The measure taken to prevent chicken pox in the baby after birth is to give:
    a. Acyclovir to woman
    b. Non specific immunoglobulin to baby at birth
    c. HZIG to baby at birth
    d. HZIG to woman before delivery
    e. HZIG and acyclovir to mother

Key: True: c

21. A women in the first trimester of pregnancy came with symptoms of mild fever, rash, sore throat, and enlarged cervical glands. The doctor, after taking history and conducting

necessary examinations, decides to terminate the pregnancy because of the danger of severe congenital malformations. Which is the likely infection?

a. HIV
b. HBV
c. Herpes simplex
d. Malaria
e. Rubella

Key: True: e

Communicable Diseases

1. A woman brought her child with congenital anomalies of heart and cataract. She gave history of mild fever and rash in the first trimester of pregnancy, which settled with mild antipyretics. The possible gestational condition that resulted in these anomalies was:

a. Measles
b. Herpes
c. Rubella
d. Drugs taken in pregnancy
e. Streptococcal scarlet fever

Key: True: c

2. A 22 years old man presented with painful, vesicular and pustular eruption in the distribution of sensory nerve roots on his back. He gave history of chicken pox infection at ten years of age. The likely diagnosis was:

a. Measles
b. Meningococcemia
c. Herpes simplex
d. Scarlet fever
e. **Herpes zoster**

Key: True: e

3. A patient who has come from India, reports to a health facility with severe generalized aches and pain and rash on the body excluding palms and soles. The most likely diagnosis is:

a. Scarlet fever
b. Trypanosomniasis
c. Malaria
d. Dengue
e. Yellow Fever

Key: True: d

4. There is an epidemic of Meningococcal Meningitis among jail prisoners. The best chemoprophylaxis for the protection of contacts is by giving:

a. **Rifampicin**
b. Chloramphenicol
c. Chloroquine
d. Doxicyline
e. Penicillin

Key: True: a

5. Six of the ten family members living in a single room house complain of intense itching with scratching in axillae, groin & hands; it is more marked at night. The most likely diagnosis is:

a. **Scabies**
b. Dermatitis
c. Eczema
d. Psoriasis
e. Dermatosis

Key: True: a

6. A 5 years old boy developed fever with typical "dew drop rash" over his body. It appeared first on the trunk and spread to arms and legs later; there were no signs of neck stiffness and rigidity. What could be likely diagnosis?

a. Small pox
b. Measles
c. Tanapox
d. Meningococcal meningitis
e. **Chicken pox**

Key: True: e

7. A school child is diagnosed to have chicken pox. He should be isolated from other school children till:

a. **The scabs fall off**
b. Two days after the scabs are formed
c. Three days after the fever develops
d. Five days after the development of pustules
e. Seven days after the development of pustules

Key: True: a

8. A mother brought her 4 years old child with complaint of sore throat, difficulty in swallowing and low grade fever. On examination mild erythema and whitish membrane was found on the posterior pharynx. The doctor diagnosed him as a case of Diphtheria. Mother gave history of complete course of immunization. In addition to penicillin what would be your line of management?

a. Supportive treatment
b. **Passive immunization**
c. Active immunization

d. Active plus passive immunization
e. Active and passive immunization plus Tracheostomy

Key: True: b

9. An anxious mother came to OPD. Her son was diagnosed as a case of Meningitis last week. She was worried about her two daughters who were still well. Physician advised chemoprophylaxis by:

a. Quinolones
b. Rifampicin
c. Macrolides
d. Penicillin
e. Gentamicin

key: b

10. In Pediatric OPD the physician examined a 3 years old child with low grade fever, mild erythema in the throat and whitish membrane on the left side tonsil. The cervical lymph node was palpable. The doctor advised the mother to isolate the child for 7 days from other contacts of less than 5 years old. The most probable diagnosis is

a. Phryngitis
b. Tonsillitis
c. Diphtheria
d. Acute Laryngitis
e. Whooping cough

Key: True: c

11. A student of nursery class developed mild fever along with irritating cough gradually becoming paroxysmal along with characteristic whoop. What you suggest for how long the student should be isolated from the class?

a. I week
b. 2 weeks
c. 3 weeks
d. **4 weeks**
e. 6 weeks

Key: True: d

12. A 30 years old man presented in emergency in POF hospital with complaint of severe headache, fever and vomiting. On examination neck stiffness was found. He has just returned from hajj and gives no history of preceding ailment or injury. The most probable diagnosis is

a. Meningitis
b. Tetanus
c. Brain abscess
d. Cerebral Malaria
e. Ischemic stroke

Key: True: a

13. If you being a field doctor in department of public health, are given a task to visit a low socioeconomic community of a slum and to give report about the immunization status of the community against Tuberculosis. The single most important clue to this immunization is
    a. Montoux test
    b. Tuberculous patients
    c. **BCG scar**
    d. X-ray chest
    e. Sputum for AFB

Key: True: c

14. An epidemiologist was assigned to find out all the cases, both new and old of T.B, in a slum located near Islamabad during year 2007.Prevelance of tuberculosis is confirmed by:
    a. mass miniature radiography
    b. Sputum examination
    c. **Sputum culture**
    d. Tuberculin test
    e. BCG scar mark

Key: True: c

15. Ministry of health in collaboration with WHO is working to eradicate polio from Pakistan since 1992 .But still there are few cases of polio identified each year .source of most Polio infection is
    a. Clinical carriers
    b. Healthy carriers
    c. Convalescent carriers
    d. Animal source
    e. soil

Key: True: c

16. A 10 years old boy was brought to a doctor in a hospital with history of moderate fever with shivering and abundant rash on the trunk and buccal mucosa. On examination there were vesicles filled with clear fluid on the trunk and legs. The physician told the mother that child is suffering from
    a. Herpes
    b. **Chicken pox**
    c. Rubeola
    d. German measles
    e. Tanapox

Key: True: b

17. A man living in a slum area was brought to the emergency of the DHQ Rawalpindi with history of passing rice water stools about 20-30 times a day and vomiting for last 1 day. On examination there were signs of severe dehydration and patient was in shock. What is the likely diagnosis?
    a. Typhoid
    b. Amoebic dysentery
    c. Cholera
    d. Food poisoning
    e. Giardiasis

Key: True: c

18. In a shanty town of Karachi where intermittent water supply system existing a woman noticed lots of mosquitoes which were black and spotted around the water tank. Keeping in mind this situation which disease is likely to be seen in this family?
    a. **Dengue**
    b. Yellow fever
    c. Malaria
    d. Filariasis
    e. Encephalitis

Key: True: a

19. A mother brought her infant to a doctor and told him about the severe itching and restlessness at night. Examination revealed presence of burrows and vesicles especially on sides of fingers and finger webs
    a. Scabies
    b. Insect bite
    c. Prickly heat
    d. Ring worm
    e. Onchocerciasis

Key: True: a

20. After an epidemic of measles in a village near Taxilla, some children reported with history of weight loss and blindness, from corneal scarring. The most likely cause of this complication is deficiency of
    a. Vitamin K
    b. Vitamin D
    c. Vitamin A
    d. Vitamin C
    e. Vitamin B12

Key: True: c

21. An outbreak of measles occurred in rural areas surrounding the District Rawalpindi. The local Government planned mass immunization of children against measles. Immunity conferred by measles vaccine last for
    a. 1 year
    b. 5 years
    c. 10 years
    d. 15 years
    e. **Life long**

Key: True: e

22. In a day care centre a child was having measles. In the centre the children between the ages of 9-12 months can be protected against measles with measles vaccine, provided that this is given with in
    a. 1 day of exposure
    b. **3 days of exposure**
    c. 5 days of exposure
    d. 7 days of exposure
    e. 10 days of exposure

Key: True: b

23. A pregnant lady reported to ante natal clinic with signs and symptoms of Rubella during 28^{th} week of gestation. She was insisting for the induction of labor because of fear of congenital malformations of fetus. She was told by the doctor that Rubella does not cause major abnormalities of fetus after
    a. 8^{th} week of pregnancy
    b. 12^{th} week of pregnancy
    c. **16^{th} week of pregnancy**
    d. 20^{th} week of pregnancy
    e. 24^{th} week of pregnancy

Key: True: c

24. A 7 years old child presented with sore throat low grade fever rash on face and posterior auricular and cervical lymphadenopathy.The most probable diagnosis is
    a. Chicken pox
    b. Small pox
    c. Measles
    d. Rubella
    e. Mumps

Key: True: d

25. You are performing the duties of Airport Medical Officer. An Aircraft has landed from Africa and you found that one of the passengers is not having the vaccination certificate against yellow fever. What would you suggest for him?
    a. Vaccination
    b. **Quarantine for 10 days**
    c. Isolation for 1 month
    d. Chemoprophylaxis
    e. Passive immunization with non specific immunoglobulin

Key: True: b

26. A neonate presented in paedeatric emergency on 8th day of birth with high grade fever, locked jaw and stiffness of whole body. Mother gave history of home delivery in a village and application of cow dung on the umbilical stump. She gave no history of T.T during pregnancy. The most probable diagnosis is:
    a. Encephalitis
    b. Meningitis
    c. **Tetanus neonatarum**
    d. Epilepsy
    e. Cerebral malaria

Key: True: c

27. A 25 years lady was brought in gynae emergency of PIMS hospital at Islamabad with high grade fever, stiffness of whole body and locked jaw. Her mother gave the history that she got an abortion done at 8th week from a local dai 3 days back. The per-vaginal examination revealed foul smelling purulent discharge. What is the most probable diagnosis?
    a. **Puerperal tetanus**
    b. PID
    c. UTI
    d. Strychnine poisoning
    e. Vaginal diphtheria

Key: True: a

28. A 3rd year MBBS student of FJMC presented in ENT OPD with complaint of soar throat, pain of swallowing & low grade fever examination revealed erythema on the pharynx and a whitish membrane on the pharynx extending to the left tonsil. The doctor diagnosed her as a case of diphtheria. What do you suggest minimum isolation period:
    a. **Six daily negative throat and nasal swabs report**

b. Till the signs & symptoms settle down
c. One week course of antibiotic
d. For days
e. Till complete blood picture becomes normal

Key: True: a

29. A disease outbreak occurred in India last year. Many patients either presented with enlarged painful lymph nodes or pneumonia with high grade fever and toxicity. High mortality due to pneumonia was also reported. The likely epidemic is:

a. Dengue
b. Plague
c. Filariasis
d. Yellow fever
e. Malaria

Key: b

30. A mother brought her child with history of paroxysmal cough and restlessness. On examination he showed a loud inspiratory sound and sub-conjuctival haemorrhage. On the basis of clinical presentation what should be the drug of choice:

a. **Erythromycin**
b. Ampicillin
c. Tetracycline
d. Sulphadiazine
e. Co- trimoxazole

Key: a

31. A 40 year old tuberculous patient on ATT for the last two months presented to his physician with complaints of tingling, numbness and loss of peripheral sensation. The likely anti tuberculous drug to have caused these symptoms is:

a. Isoniazid
b. Rifampicin
c. Streptomycin
d. Pyrazinamide
e. Ethambutol

Key: a

32. 10 years old boy presented with high grade fever, chills, aches, cough and generalized weakness. He was diagnosed as a case of influenza. The most dreaded complication is:

a. Encephalitis
b. Pneumonia
c. Toxic shock syndrome
d. Reye's syndrome
e. Sub-Conjunctival hemorrhages

Key: b

33. A patient comes to medical OPD with complaints of continuous fever and abdominal pain for ten days. His blood culture shows. typhi. The doctor decided to admit him in medical ward and the patient should be isolated till:

a. Six stool cultures become negative
b. **Three stool culture become negative**

c. three blood culture become negative
d. one stool culture become negative
e. Patient become afebrile

Key: b

34. On routine investigation of mess workers of girls' hostel, Dr. Sarah noted that two of the mess worker showed positive stool culture for s.typhi although they were symptom free. They require:

a. No treatment
b. isolation only
c. Quinolones for 1 week
d. **Ampicillin plus probenecid for 1 week**
e. Vaccination

Key: d

35. A 22 years old married non pregnant woman developed rubella infection. In order to avoid congenital rubella syndrome in her pregnancy she should be given:

a. Antibiotics
b. Active immunization
c. Non specific immunization
d. **Advice to avoid conception for 12 weeks**
e. Anti viral therapy

Key: d

36. A 40 years old man was diagnosed as a case of TB 4 weeks ago. He has been taking ATT for the last 3 weeks. His sputum analysis showed AFB on follow up investigation. Such a case of TB is known as:

a. Failure case
b. **Newer case**
c. Defaulter
d. Transfer out
e. Resistant

Key: b

37. A primigravida presented in Medical OPD at 39 weeks of gestation with dew drop rash on the body for 1 day she was diagnosed as having chicken pox she was told that her baby is at higher risk of having:

a. Low birth weight
b. Microcephaly
c. Atrophied limbs
d. **Varicella infections**
e. Cutaneous scars

Key: d

38. A 17 year old boy was brought in emergency department with symptoms of acute encephalopathy. He was admitted in ICU, initial investigation revealed that his liver had undergone fatly degeneration. His father gave history of rash on his body. Most likely he suffered from:

a. Measles
b. Rubella
c. Chicken pox
d. Mumps
e. Cutaneous diphtheria

Key: c

39. After serial sonography it was told to the apparently healthy pregnant woman that her baby is microcephalic and of low birth weight she gave no important medical history of note except mild febrile illness with rapidly disappearing rash in 2nd month of pregnancy. Most likely she suffered from:

a. Chicken pox
b. **German Measles**
c. Measles
d. Cutaneous diphtheria
e. Malaria

Key: b

40. 4 years old girl was having fever, cough with a characteristic whoop. She was diagnosed as a case of whooping cough several antibodies are effective they are important as they:

a. Reduce the frequency of spasm
b. Control severity of disease
c. Shorten the illness
d. **Control secondary bacterial infection**
e. Prevent carrier state

Key: d

Snake Bite

1. 10 years old boy was brought to a rural health centre with probable history of snake bite 12 hours back. On examination of the wound, multiple small punctured lesions with a mild swelling were observed; no other local & systemic signs of envenomation were found, but the patient was very anxious. The management for this emergency is:

a. Polyvalent anti snake venom serum
b. Reassurance
c. Antibiotics
d. Tourniquet
e. Anti rabies vaccine

Key: True: b

2. A 30 years old lady is bitten by a snake. She complains of giddiness, lethargy, muscular weakness and spreading paralysis. The type of snake involved is:
a. Sea snake
b. Green pit viper
c. **Elapid snake**
d. Bamboo snake
e. Russell's viper

Key: True: c

3. A 7 years old child reported to a private hospital with history of snakebite. On examination there were petechial haemaorrhages and bleeding from rectum. The toxic principal in snake venom responsible for those signs is:
a. Proteolysin
b. Neurotoxin
c. Cholinesterase
d. Hyaluronidase
e. Thromboplastin

Key: True: e

4. A case of snake bite was brought to a basic health unit. According to the American Red Cross the immediate step to be taken is:
a. Ice packing
b. Apply tourniquet
c. Give incisions in the wound
d. **Immobilize the bitten area**
e. Give electric shock.

Key: True: d

5. 45 Years old man was brought to emergency department of hospital with history of snake bite. There was intense local pain, swelling and ecchymosis at site of bite. Few hours later bleeding started from the gums, followed by coma and death. The most probable cause of death is:
a. Respiratory paralysis
b. **Circulatory collapse**
c. Renal failure
d. Sepsis
e. Pulmonary embolism

Key: True: b

6. 45 Years old man was brought to emergency department of hospital with history of snake bite. There was intense local pain, swelling and ecchymosis at site of bite. Few

hours later bleeding started from the gums, followed by coma and death. The type of snake involved is:

a. Sea snake
b. Common krait
c. **Green pit viper**
d. Cobra
e. Elapid snake

Key: c

7. A 7 years old child reported to a private hospital with history of snakebite. On examination there were petechial haemaorrhages and bleeding from rectum. The toxic ingredient in snake venom responsible for those signs is:

a. Proteolysin
b. Neurotoxin
c. Cholinesterase
d. Hyaluronidase
e. Thromboplastin

Key: e

Housing

1. Six of the ten family members living in a single room house complain of intense itching with scratching in axillae, groin & bands; it is more marked at night. The most likely diagnosis is:

a. Scabies
b. Dermatitis
c. Eczema
d. Psoriasis
e. Dermatosis

Key: True: a

1. Six of the ten family members living in a single room house complain of intense itching with scratching in axillae, groin and hands; it is more marked at night. The most likely diagnosis is:

2. f. **Scabies**
3. g. Dermatitis
4. h. Eczema
5. i. Psoriasis
6. j. Dermatosis

Key: True: a

3. In a house consisting of two living rooms, the door and windows are facing each other. This will provide:

a. Low humidity
b. Aspiration
c. **Cross ventilation**
d. Diffusion
e. Acoustic discomfort

Key: True: c

4. A 12 members family was living in a house consisting of two rooms. Which disease is most likely to be common in the given situation?

a. Asthma
b. **Tuberculosis**
c. Ca. Bronchus
d. Cystic fibrosis
e. Emphysema

Key: True: b

5. A 5 member family was residing in a small house. The available floor space to one person was 30 sq ft. The problem which is more likely to be associated with this available space is:

a. **Psychosocial**
b. Malnutrition
c. Typhoid
d. Enterobius vermicularis
e. Malaria

Key: True: a

Nutrition

1. If a child presents with protein energy malnutrition showing signs of loss of subcutaneous fat and weight reduction. The level of prevention suggested at this point is:

a. Primordial prevention
b. Health promotion
c. Specific protection
d. Early diagnosis and prompt treatment
e. **Disability limitation & rehabilitation**

Key: True: e

2. A child of 1 year presents with muscle wasting, loss of subcutaneous fat with no signs of edema and weight below 60% of WHO standard. The mother gives history of not giving enough proteins and other nutrients to the child after six months of age. The likely diagnosis is:

a. Kwashiorkor
b. Marasmus
c. Marasmus & kwashiorkor
d. Under nutrition
e. Vitamin B_1 deficiency

Key: True: b

3. A weight conscious pregnant woman wants information about her requirement of calories per day during pregnancy. You suggest an increase of:

a. 250 kcal

b. 450 kcal
c. 350 kcal
d. 550 kcal
e. 650 kcal

Key: True: c

4. A 5 years old child complains of poor vision at night with no other refractive error. He is likely to be benefited by :
a. Cod liver oil capsules
b. Oral antibiotics
c. Eye drops containing antibiotics
d. Suitable eyeglasses
e. Intra ocular lens replacement

Key: True: a

5. A strict vegetarian, Raj Gopal - 23 years old foreign student in WMC is having lethargy, easy fatigue and palpitations. He is found to have macrocytic anemia on blood CP. He is suffering from deficiency of vitamin:
a. A
b. B_1
c. B_6
d. B_{12}
e. D

Key: True: d

6. A lady brought her 8 years old child to a doctor. She complained that her child was unable to see things properly at night: child had been having diahrroea off an on. Which vitamin deficiency is most likely in this child?
a. A
b. B
c. D
d. E
e. K

Key: True: a

7. 2 years old child was brought to the emergency department. He was having convulsions. On a rapid general physical examination kyphoscoliosis was discovered. X-ray showed swollen lower end of radius. What is the likely diagnosis?
a. Osteomalacia
b. Keratomalacia
c. Rickets
d. Pellagra
e. Beriberi

Key: True: c

8. A Pakistani physician went to work in South Africa. A woman reported with diahrroea. On examination she was found to have glossitis and stomatits. Her detailed investigations revealed presence of anemia. She was diagnosed as a case of Niacin deficiency. The likely food to have caused this deficiency state is:
   a. Legumes
   b. Maize
   c. Whole wheat
   d. Raw rice
   e. Pearl millets

Key: True: b

9. A chronic alcoholic was complaining of loss of appetite and pain in lower legs. On examination his gate was ataxic. He is suffering from deficiency of:
   a. Niacin
   b. Thiamine
   c. Riboflavin
   d. Folate
   e. Pantothenic acid

Key: True: b

10. A patient of pulmonary tuberculosis was put on anti tuberculous therapy. He was given Rifampicin, INH, Ethambutol and Pyrizinamide. He should be advised to have a supplement of:
   a. Niacin
   b. Pyridoxine
   c. Riboflavin
   d. Thiamine
   e. Pantothenic acid

Key: True: b

11. A pregnant lady comes to Gynae OPD complaining about increasing lethargy and shortness of breath. On examination she is found to have glossitis. Her blood CP reveals macrocytic anemia. The most likely deficiency which has caused this condition is:
   a. Folic acid
   b. Pentothenic acid
   c. Vitamin B_6
   d. Niacin
   e. Thiamine

Key: True: a

12. A 30 years old lady was brought to the hospital with strong labour pains for the last 3 hours and no progress. She was found to have pelvic deformities which lead to cephalopelvic disproportion. The baby was delivered by a cesarean section. The woman is likely to have suffered from the deficiency of:

a. Vitamin A
b. Vitamin B
c. Vitamin C
d. Vitamin D
e. Vitamin K

Key: True: d

13. A person who subsisted on taking maize only for many years reported to a health facility with the signs of glossitis.His history suggested frequent attacks of diarrhea and memory loss. The likely condition is:

a. Pellagra
b. Riboflavin deficiency
c. Beri Beri
d. Iron deficiency
e. Protein malnutrition

Key: True: a

14. Strictly vegetarian Hindu teacher presented with lower limbs weakness. His examination revealed upper motor neuron signs in lower limbs. His blood CP showed macrocytic anemia. He is probably suffering from deficiency of vitamin:

a. A
b. B_6
c. B_{12}
d. B_1
e. D

Key: True: c

15. 15 years old boy living in Murree is having swelling in the neck, Apart from weakness and constipation; there are no other complaints at present. He is likely to be suffering from deficiency of:

a. Calcium
b. Flourine
c. Iodine
d. Iron
e. Sodium

Key: True: c

16. A dental surgeon appointed in a rural health centre reports an increased incidence of dental caries in the people of that area. A research team confirmed that water supply of that area is deficient in:
    a. Chloride
    b. Sodium
    c. Calcium
    d. Fluoride
    e. Zinc

Key: True: d

17. The non clinical Vit A deficiency is more common as compared to the clinical, threatening the health of as many as one third of the world's children. The best proxy indicator of this is:
    a. **Infant mortality rate**
    b. Maternal mortality rate
    c. Literacy rate
    d. Proportion of the rural population
    e. Specialized medical care

Key: True: a

18. A 4 year old child was brought in Pediatric OPD with complaint of inability to see at night for the last few days, Pediatrician suspected deficiency of vitamin A. Although the clinical signs of vitamin A deficiency are rare, but if occurred, what would be the first clinical sign?
    a. Retinal detachment
    b. **Conjuctival xerosis**
    c. Bitot spot
    d. Corneal xerosis
    e. Keratomalacia

Key: True: b

19. In a Madrasa of a remote area, 14 girls of 9 years of age were residing to memorize Quran Pak . They were treated well but they observed strict Pardah and were never allowed to visit outside. On returning home after 5 years, 10 of them were short statured. The most likely reason of being short statured:
    a. Vitamin A
    b. Vitamin B_{12}
    c. Vitamin C
    d. Vitamin D
    e. Vitamin K

Key: True: d

21. Researches decided to study the impact of iodized salt programme especially in hilly areas of Pakistan. They had chosen the most sensitive indicator for monitoring environmental iodine deficiency which was:
    a. Prevalence of goiter
    b. Prevalence of myxoedena
    c. **Prevalence of neonatal hypothyroidism**
    d. Urinary iodine excretion
    e. Prevalence of cretinism

Key: True: c

22. Government of Pakistan has accepted iron fortification to reduce prevalence of anemia; it has recently been decided to fortify:
    a. Salt
    b. Flour
    c. Sugar
    d. Skimmed dried milk
    e. Vanaspati ghee

Key: True: b

23. Flourosis develops when water fluoride content is above 15mg/lit but it has been observed after different studies that this flourosis can also develop in people whose staple diet is:
    a. Wheat
    b. Rice
    c. **Jowar**
    d. Bajra
    e. Maize

Key: True: c

24. At 1:00 pm a mother got a phone call from the school to pick her son who was a student of III class, as he was having excessive vomiting. The child was taken immediately to the Hospital where he admitted that he had taken ice-cream in lunch break at 11:30 am. Most likely he was suffering from food poisoning due to:
    a. Salmonella
    b. Shigella
    c. **Staph aureus**
    d. Vibrio cholera
    e. Clostridium botulism

Key: True: c

25. Researchers surveyed the causes of vitamin D deficiency and its geographic distribution. They found that exposure to ultra violet rays is crucial for its adequacy, which when get

excessively filtered by the skin result in its deficiency. This deficiency is more common in:

a. Asians
b. Mongoloids
c. **Black Africans**
d. Europeans
e. Americans

Key: True: c

26 38 years old man looking Jaundiced presented in emergency with bruises and hematuria. History revealed that he was having cholestatic Jaundice leading to vitamin K deficiency which had ultimately resulted in markedly decreased:

a. **Prothrombin**
b. Serotonin
c. Arachidonic acid
d. Platelet derived growth factors
e. Von willebrand factor

Key: True: a

27. District health officer visited local general stores in Gunjranwala District. He found certain sub standard products, Turmeric was found to be containing lead chromate powder and Coriander, cow dung. He reported to the health authorities that the foods in Gunjranwala district are:

a. Intoxicated
b. Fortified
c. Adulterated
d. Infected
e. Containing additives

Key: True: c

28. 40 years old Bank officer was told to be having illeocecal Tuberculosis (Bovine) after thorough investigation. He told the physician that he had no body infected with tuberculosis in the family, but he was told by the Doctor that he acquired this infection from:

a. **Infected milk**
b. Infected client
c. Contaminated vessel
d. Polluted water
e. Intake of raw vegetables

Key: True: a

29. An obese lady accountant working in POF hospital Wah Cantt came to the dietetician there and took advice for a balanced diet. Dietetician told that important point for prudent diet is that:

a. **Dietary fat should be limited to 20-30% of total intake**
b. Un saturated fats should be less than 10%
c. Avoidance of complex carbohydrates
d. Proteins should account for 50-60% of diet
e. Saturated fats should be substituted for fat requirement

Key: True: a

30. A man belonging to a poor community presents with diarrhea and dermatitis . He also shows signs of personality and memory dysfunction. His history suggests that his staple diet is maize. The likely diagnosis is:

a. Pellagra
b. Korsakoff's psychosis
c. Vitamin B12 deficiency
d. Riboflavin deficiency
e. Biotin deficiency

Key a

31. Riboflavin is an important group of water soluble vitamin. Cereals and pulses are relatively good sources of Riboflavin. Most common lesion associated with Riboflavin, which can also be used as an index of state of nutrition of group of children is:

a. Diahrroea
b. Follicular keratosis
c. **Angular stomatitis**
d. Dementia
e. dermatitis

key: c

32. A four year old child presented in an OPD with signs of edema on limbs, blond sparse hair and dermatosis. His weight was 70% of the standard for his age. The likely condition is:

a. Nephrotic syndrome
b. Marasmus
c. Seborrhoeic dermatitis
d. Wet beriberi
e. Kwashiorkor

Key: e

33. A chronic alcoholic was complaining of loss of appetite and pain in lower legs. On examination his gate was ataxic. He is suffering from deficiency of:

a. Niacin
b. Thiamine
c. Riboflavin
d. Folate
e. Pantothenic acid

Key: b

34. A mother brought her six years old child to Eye OPD with history of night blindness. She told that the baby suffered form measles 6 months ago. Examination revealed corneal scarring. The doctor should suspect deficiency of:

a. Vitamin C
b. Vitamin A
c. Vitamin D
d. Vitamin B
e. Vitamin E

Key: B

35. Riboflavin is an important group of water soluble vitamin. Cereals and pulses are relatively good sources of Riboflavin. Most common lesion associated with Riboflavin deficiency, which can also be used as an index of state of nutrition of group of children is:

a. Cheilosis
b. Glossitis
c. **Angular stomatitis**
d. Nosolabial dyssberia
e. dermatitis

key: c

Smoking

1. A 40 years old executive who smokes three packs of cigarettes a day comes to your office for his routine health maintenance assessment. He states that he would like to quit smoking but he is having great difficulty. He has tried three times before, but he says "pressure at work mounted up and I just had to go back to smoking". Of the following factors which is the most important factor in determining the failure of smoking cessation.

a. 40 years age
b. Numbers of cigarettes
c. Stress at work
d. **Half hearted attempts to quit**
e. Type 'A' personality

Key: True: d

2. A 40 years old executive who smokes three packs of cigarettes a day comes to your office for his routine health maintenance assessment. He states that he would like to quit smoking but he is having great difficulty. He has tried three times before, but he says "pressure at work mounted up and I just had to go back to smoking". He just had to go back to smoking, the content of cigarette for this relapse is:

a. Nicotine level
b. Tar content of the cigarette

c. Aldehyde
d. Ketone
e. Carboxylic acid

Key: True: a

3. A 40 years old executive who smokes three packs of cigarettes a day comes to your office for his routine health maintenance assessment. He states that he would like to quit smoking but he is having great difficulty. He has tried three times before, but he says "pressure at work mounted up and I just had to go back to smoking". The most suitable method to increase long term smoking abstinence is:

a. Nicotine chewingum
b. Sedation
c. Daily injection of Nicotine
d. Pan chewing
e. Anxiolytic

Key: True: a

4. Cigarette smoking increases the risk of acquiring cancer of:

a. Liver
b. Bones
c. Ovaries
d. Uterus
e. **Esophagus**

Key: True:

NON-COMMUNICABLE DISEASE

1. 5 students of 4th year of Wah Medical College are doing research on risk factors and their perception among patients of coronary heart disease. They have observed that risk factor which is most significantly associated with the incidence of CHD is:

a. Hypertension
b. **High serum cholesterol**
c. Alcoholism
d. Decreased physical activity
e. Cigarette smoking

Key: True: b

2. 20 years old gentleman presented to the emergency department with history of abdominal pain an after words loss of consciousness. His mother told that he was having polydipsia, polyphagia for last few days. His blood sugar was 700 mg/dL & urinary ketones were positive. The likely diagnosis is:

a. Hyperosmolar coma
b. **Diabetic ketoacidosis**
c. Diabetes Mellitus type 2

d. Diabetes insipidus
e. Vasovagal syncope

Key: True: b

3. 45 years old male morbidly obese presented with history of polyuria & polydipsia. His blood sugar is 240 mg/dL. Most likely diagnosis is:
   a. Diabetes Mellitus type 1
   b. Diabetes Mellitus type 2
   c. Maturity onset diabetes of young
   d. Diabetes insipidus (neurogenic)
   e. Diabetes insipidus (nephrogenic)

Key: True: b

4. 80 years old gentleman presented with sudden loss of consciousness. He is diabetic on oral hypoglycemic drugs. He has skipped his breakfast today. The first laboratory investigation would be:
   a. Blood sugar level
   b. ECG
   c. Glycosylated hemoglobin
   d. EEG
   e. Urinary glucose

Key: True: a

5. 45 years old gentleman presents with a two week history of polydipsia, polyuria. He is found to have a random glucose of 200 mg/dL. There are no ketones in the urine. Most suitable for this man is that he should be:
   a. On regular hypoglycomics
   b. Reassured & reassessed after 2 months
   c. **On restricted diet & reassessed after 10 days**
   d. Admitted to hospital
   e. Immediately on Insulin therapy

Key: True: c

6. 49 years old black African male smoker with positive family history of hypertension presented with history of constant headache. His blood pressure was 140/90 mg hg. The modifiable risk factor in this particular case is:
   a. Male sex
   b. African race
   c. Positive family history
   d. Smoking
   e. Age

Key: True: d

7. An 80 kg 50 years old gentleman is found to have BP of 135/80 mm of Hg. The most important step included in primary prevention of hypertension in this patient is to:
   a. Advise lipid profile
   b. **Reduce weight**
   c. Ensure patient compliance
   d. Take antihypertensive treatment
   e. Have monthly follow up

Key: True: b

8. 45 years old hypertensive bank manager is used to high salt intake in food. Which type of salt would be less harmful for this man?
   a. Flouride
   b. **Potassium**
   c. Chromium
   d. Manganeese
   e. Bromium

Key: True: b

9. Use of oral contraceptives by women smokers over 35 years of age is associated with increased risk of:
   a. Cervical cancer
   b. Breast carcinoma
   c. Chronic bronchitis
   d. **Coronary heart disease**
   e. Peripheral neuropathy

Key: True: d

10. A forty years old woman presents with an ovarian cyst; you want to screen her for breast cancer before suggesting any hormonal treatment. What will you advise?
   a. Chest radiograph
   b. **Mammography**
   c. Biopsy of breast
   d. Blood levels of progesterone
   e. Tumor markers

Key: True: b

11. During a health education session about non communicable diseases in a female community; you will inform that genetics and family history make a woman more prone to have:
   a. Cataract

b. Stroke
c. **Breast cancer**
d. Oral cancer
e. Liver cirrhosis

Key: True: c

12. Epidemiologist linked prevalence of carcinomas mostly related with parasitic and viral infections, in developing countries due to bad hygienic conditions. During the research strong linkage was proposed between carcinoma cervix and:
a. Cytomegalovirus
b. Human papilloma virus
c. Epstein bar virus
d. Helicobacter pylori
e. Scistosoma Hematobium

Key: True: b

13. Dietary factors have a strong influence on the development of carcinomas. A research article was read in Marriott Islamabad regarding this fact and gastric carcinoma was linked with:
a. High fat intake
b. Beef consumption
c. Smoked fish
d. Presence of nitrosamines
e. High dietary fibre content

Key: True: d

14. Japan has low incidence of prostate cancer as compared to the incidence in USA. The incidence of carcinoma prostate decrease in Japanese when migrate to U.S. This support:
a. Nutritional effect
b. Environmental effect
c. Genetic effect
d. Metabolic effect
e. Occupational effect

Key: True: b

15. Japan has low incidence of prostate cancer as compared to the incidence in USA. The incidence of carcinoma prostate in Japanese did not change with their migration to the U.S. It supported:
a. Nutritional effect
b. Environmental effect
c. Genetic effect
d. Metabolic effect

e. Metabolic effect

Key: True: c

16. A 10 years old boy presented with complaints of fever, accompanied by profuse sweating for the last 1 week. He also complained of multiple joint pains. Serum ASO titre was increased. The likely diagnosis is:

a. Malaria
b. Dengue
c. Hepatitis B
d. Rheumatic fever
e. Ricketts

Key: d

17. Cancer registration is important for any cancer control programme. It provides a base for assessing the magnitude of problem and for planning the necessary action. If the size for a population based case registry is 6 million it is considered to be:

a. Inadequate
b. Very small
c. Adequate
d. Very large
e. Unusually large

Key: c

18. A 35 years old man hypertensive, smoker and having positive family history of diabetes and obesity suddenly became unconscious. CT scan was suggestive of hemorrhagic stroke. The main risk factor of stroke in this case is:

a. Hypertension
b. Diabetes
c. Obesity
d. Smoking
e. Age

Key: a

19. A 40 years old woman taking oral anti-diabetics for last 5 years, with poor control of blood sugar presented to physician for routine checkup. The test which provides a long term index of glucose control in this case would be:

a. Standard oral glucose test
b. Random blood sugar
c. Glycosylated hemoglobin
d. Urine sugar examination
e. fasting blood sugar examination

Key: c

20. Cancer is the second leading cause of death in developed countries. It is regarded as a modern slow epidemic. The most common site of cancer in men and women in the world is:

a. Lung

b. Stomach
c. Colorectal
d. Liver
e. Oral cavity

Key: a

21. A 45 years old man has weight of 70 kg and height of 1.6 m. His BMI is 27.3. He is:
a. Under weight
b. Normal weight
c. Over weight
d. Obese
e. Severely obese

Key: c

SEXUALY TRANSMITTED DISEASES

1. A 25 years old female presented to a Gyaenacologist with complains of severe lower abdominal pain, dyspareunia and intermenstrual bleeding. On examination cervix was inflamed with mucopurulent discharge and contact bleeding. The most likely cause is:
a. Staphylococcus aureus
b. Gonococcus
c. Chlamydia
d. Trichomonas
e. Treponema palidum

Key: b

2. A 23 years old woman presented to a doctor with complaints of vaginal itching. On speculum examination it revealed white cheesy discharge adherent to walls of vagina with vaginal inflammation. The most likely causative organism is:
a. Cancdida albicans
b. Trichomonas vaginalis
c. Gardnerella Spp
d. Condyloma accuminatum
e. Treponema palidum

Key: a

3. A sexually active female of age 23 years presented to a lady doctor with complaints of tenderness around the external genitals and high grade fever for the last 2 to 3 days. On examination it revealed small tender ulcers around urethra, vagina and perianal area. Inguinal lymph nodes were enlarged and tender. The most likely diagnosis is:
a. Anogenital warts

b. Genital herpes simplex
c. Genital molluscum contagiosum
d. HIV
e. Vega bonds

Key: b

4. A young man presented to a doctor in the emergency of Agha Khan Hospital Karachi with bilateral purulent conjunctivitis and high grade temperature, he gave the history of returning from Far East country where he had a sexual contact. On examination there was swelling of eye lids and conjunctiva and copious purulent discharge. On laboratory smear diplococcic were seen; these are:

a. Streptococci
b. Gonococci
c. Staphylococci
d. Meningococci
e. H. influenzae

Key: b

5. A 34 years old woman presented in the emergency department to a lady doctor with painful vulvar ulceration. On examination the ulcer had irregular margins with undermined edges. The ipsilateral inguinal lymph nodes were swollen and tender. The most likely diagnosis is:

a. Syphilis
b. Herpes
c. Chancroid
d. Lymphogranuloma venereum
e. HIV

Key: c

6. A 25 years old married woman came to a lady doctor with complaints of vaginal discharge with "fishy" odor and is particularly noticeable following coitus. On examination there was white homogenous discharge in vagina with no inflammation. The most likely diagnosis is:

a. Candida albicans
b. Bacterial vaginosis
c. Trichomona vaginalis
d. HIV
e. Normal post-coital discharge

Key: b

School Health

1. A school child is diagnosed to have chicken pox. He should be isolated from other school children till:

a. The scabs fall off

b. Two days after the scabs are formed
c. Three days after the fever develops
d. Five days after the development of pustules
e. Seven days after the development of pustules

Key: True: a

2. Kyphosis and scoliosis occur in school children with the use of:
a. Zero desk
b. Minus desk
c. Zero and plus desk, both
d. Zero and minus desk, both
e. Plus desk

Key: True:

3. A teacher of 4th class brought her student to the school medical officer with complaints of gum bleeding and subcutaneous bruising for last few days. The student looked very pale. The clinical picture represents deficiency of:
a. Tocopherol
b. Ascorbic acid
c. Thiamine
d. Pyridoxine
e. Cyanocobalamin

Key: b

4. A child of 6 presented to school medical officer with complains of fever, malaise and painful swallowing. On examination a diffuse swelling was observed on the sides of the face below and in-front of the ears. The doctor diagnosed him as a case of mumps. What is the most appropriate management for him?
a. Analgesics only
b. Active and passive immunization
c. Passive immunization
d. Antibiotics only
e. Rest, analgesics and balanced diet

Key: e

5. In a health education programme conducted at school about deficiency of micronutrients leading to various infections and high mortality. To avoid susceptibility of children to infection the vitamin supplement to be emphasized more is:
a. B1
b. B2
c. A
d. D
e. K

Key c

Drug Abuse (Substance abuse)

1. A 40 years old man was brought to hospital by his brother for gastritis. He also reported his brother's dependence on a substance. On examination he had signs of peripheral neuropathy and cirrhosis of liver. The likely abused substance is:
   a. Alcohol
   b. Cannabis
   c. Caffeine
   d. Tobacco
   e. Cocaine

Key: True: a

2. Another name for superman's drug is:
   a. Nicotine
   b. Amphetamine
   c. Ethyl alcohol
   d. Cocaine
   e. Marijuana

Key: True:

3. A 40 years old man was brought to hospital by his brother for gastritis. He also reported his brother's dependence on a substance. On examination he had signs of peripheral neuropathy and cirrhosis of liver. The likely abused substances are:
   a. Alcohol
   b. Cannabis
   c. Caffeine
   d. Tobacco
   e. Cocaine

Key: True:

4. Self administration of drugs for non medical reason in frequency and quantities that may impair an individual's ability to function effectively and may result in physical, social and emotional harm is best defined as:
   a. Drug abuse
   b. Drug dependence
   c. Drug tolerance
   d. Drug addiction
   e. Hang over effect

Key: a

Miscellaneous

1. Which one of the following is required for the direct method of standardization?
   a. Age specific death rates of the populations being compared

b. Number of persons in each age group of the compared population
c. Crude mortality comparison of standard population with the normal population
d. Life expectancy of the compared populations
e. Proportionate mortality of compared populations

Key: True: a

2. Which of the following rates is the most useful measure for comparing mortality of two populations?
a. Standardized death rate
b. Infant mortality rate
c. Crude death rate
d. Cause -specific death rate
e. Proportional mortality rate

Key: True: a

3. Standardized mortality rate are different from crude mortality rate because of difference in:
a. Recording of deaths
b. Utilization of health services
c. Places of residence
d. Age Composition of population being compared
e. Prevalence of diseases and health related problems

Key: True: d

4. When a researcher wants to prove an association between a particular food and skin cancer it is likely to be rejected for not having:
a. Specificity
b. Consistency
c. Coherence
d. Strength of an association
e. Biological plausibility

Key: e

5. If the association between two variables given by one researcher is replicated by other researchers too, then it has
a. Specificity
b. Consistency
c. Coherence
d. Temporal sequence
e. Biological plausibility

Key: True: b

6. Smoking results in many diseases other than lung cancer particularly, if it indicates causal association which characteristic it lacks?

a. Specificity
b. Strength of association
c. Coherence
d. Consistency
e. Temporal sequence

Key: True: a

7. An uneducated man of 30, working in a cement industry, exhibiting bad personal hygiene, presents with acute diarrhea and dehydration. Many factors can play a role in this condition but the likely host factor to have caused this condition is:

a. Age
b. Sex
c. Education
d. Occupation
e. Bad personal hygiene

Key: True: e

8. 10 cases of food poisoning had been reported in hospital, 2 out of these developed mild gastrointestinal symptoms, 4 developed moderate dehydration but recovered and 2 succumbed to the disease. The characteristic of the organism of food poisoning that produces the severest form of the disease is:

a. Infectivity
b. Pathogenicity
c. Virulence
d. Communicability
e. Resistibility

Key: True: c

9. Shortly after a dormitory barbeque at Wah medical college, students came back to their rooms and most of them (62 out of 74 students) experienced acute vomiting and diarrhea. This epidemic may be labeled as:

a. Point source
b. propagative
c. Multiple exposure common source
d. Slow epidemic
e. Pandemic

Key: True: a

10. Ten days after a measles outbreak in Wah Cantt, several elementary school children became symptomatic. Subsequently, additional cases were found among friends and families of the infected students. This epidemic may be known as

a. Point source
b. propagative

c. Common source
d. Pandemic
e. Vector borne

Key: True: b

11. After returning home from a family planning clinical, Dr. Saeed noticed a slight itching between his fingers. Within 2 days his wife had similar itching, as did his son one day later. This epidemic (scabies) may be classified as:

a. Point source
b. Indirect transmission
c. Common source
d. Serial transmission
e. Vehicle borne transmission

Key: True: d

12. If an epidemiologist while investigating an epidemic makes a graph to plot distribution of cases of a disease by time of onset and gets a polymodal distribution curve. The most likely disease is:

a. Salmonellosis
b. Staphylococcal food poisoning
c. Measles
d. Typhoid
e. Hepatitis A

Key: True: c

13. Public Policies in Pakistan aim at avoiding the underlying reasons for the development of environmental and atmospheric concentration of SO2 to protect the health of people. It's an example of:

a. Primordial
b. Primary
c. Secondary
d. Rehabilitation
e. screening

Key: True: a

14. The number of deaths due to diarrhoea, total cases of measles, total number of accidents and the total number of drug addicts were to be reported by a researcher. The best title given to all of this data would be:

a. Mortality data
b. Morbidity data
c. Case fatality rate
d. Addiction rate

e. Health related data

Key: True: e

Parasitology

1. A 30 years old man resident of central London presented to a Pakistan doctor working in king George hospital central London with complain of nausea, vomiting and abdominal pain for 1 day. He gave the history of a worm in stool with segmented body. Detailed history showed that he is a non vegetarian and parks is the main food constituent most probably the worm passed in stool is:

a. Ankylostoma duobenale
b. Ascaris lumbricoides
c. T. sollium
d. T. saginata
e. Entrobius vermicularis

Key: True: c

2. A 30 years old man presented in urology OPD with complains of haematuria at the end of micturation not associated with pain, urgency or frequency urine R/E was suggested of haematuria. Microscopic examination of the urine revealed presence of oval shaped eggs. Most probably he is suffering form:

a. Vesical calculus
b. Carcinoma bladder
c. Urinary schistosomiasis
d. Trachomonas vaginalis infections
e. Renal cell carcinoma

Key: True: c

3. The only reservoir of Ascaris lumbricoides (round worm) is:

a. Dogs
b. Cattle
c. Man
d. Birds
e. Fish

Key: True: c

4. A mother brings her four year old child to a doctor with a complaint of intense perianal itching. Despite being fed properly, he has not gained weight for the last few months. The likely condition is:

a. Enterobiasis
b. Ascariasis
c. Scabies
d. Ankylostomiasis

e. Filariasis

Key: a

5. A patient presents with fever, rigors and chills. He complains of severe weakness and lethargy. His blood film is positive for ring forms of protozoa. The likely diagnosis is:
   a. Malaria
   b. Ameobiasis
   c. Balantidiasis
   d. Toxoplasmosis
   e. Leishmaniasis

Key: a

Behavioural sciences

1. Ganja' is obtained from:
   a. Coca leaves
   b. Poppy seeds
   c. **Cannabls indica**
   d. Ergot alkaloid plant
   e. lathyrus sativus

Key: c

2. The "abused drug" that causes sedation is:
   a. Cocaine
   b. Amphetamine
   c. **Opium**
   d. LSD
   e. Mescalin

Key: c

3. A 40 years old man was brought to hospital by his brother for gastritis. He also reported his brother's dependence on a substance. On examination he had signs of peripheral neuropathy and cirrhosis of liver. The likely abused substance is:
   a. alcohol
   b. Cannabis
   c. Caffeine
   d. Tobacco
   e. Cocaine

Key: a

4. Cigarette smoking increases the risk of acquiring cancer of:
   a. Liver
   b. Bones

c. Ovaries
d. uterus
e. **Esophagus**

Key: e

1. Wearing a crash – helmet to prevent head injury while riding a motor-bike refers to:
   a. Specific prtotection
   b. Health promotion
   c. Early diagnosis & prompt treatment
   d. Disability limitation
   e. Rehabilitation

Key: True:

5. A 23 years old married woman came to the hospital in Gynae OPD with complaints of vaginal itching and discharge. Speculum examination of vagina revealed foul smelling greenish – yellow discharge. What is the likely diagnosis?
   a. Candidiasis
   b. **Trichomoniasis**
   c. Syphilis
   d. Pelvic inflammatory disease
   e. Gonorrhea

Key: b

6. To control the rising incidence of non communicable diseases, legislation based on tobacco control will be adopted to prevent onset of the risk behaviour. This prevention will be
   a. Primordial
   b. Health promotion
   c. Specific protection
   d. Disability limitation
   e. Rehabilitation

Key. a

6. A mother brings her 10 year old boy to a psychiatrist. She complains that when her boy gets close to the school, he starts getting severe pain in the abdomen which settles upon coming back. His IQ is with in normal limits and his academic record is satisfactory. The clinical presentation is suggestive of
   a. Juvenile delinquency
   b. Psychosomatic disorder
   c. Mental retardation
   d. Educational difficulties
   e. Habit disorder

Key. b

7. A patient presented to a psychiatrist showing minor mental changes. He stated that he experienced rebound lowering in mood in the absence of the drug that he had been taking for constant mental stimulation. The likely drug which he had been taking is:
   a. Benzodiazepines
   b. Heroine

c. Methadone
d. Morphine
e. Amphetamines

Key e

Mental health

1. A 30 years old man presented with complaints of loss of appetite and weight. He also admitted his dependence on a substance. On examination he had palmar erythema and ataxic gait. The likely abused substance is:
   a. Barbiturates
   b. Heroin
   c. Alcohol
   d. Tobacco
   e. Cocaine

Key: c

Accidents

1. In prevention of traffic accidents the most effective measure is:
   a. Licensing of drivers
   b. Provision of seat belts
   c. Enforcement of traffic laws
   d. Inspection of vehicles periodically
   e. Medical inspection of drivers every six months

Key: True:c

2. October 2005 earthquake caused countless deaths. Several NGO'S participated to combat the post disaster phase and the most important point they considered in order of preference was:
   a. Vaccination against infections diseases
   b. Provision of safe water and food
   c. Disposal of dead bodies
   d. Disposal of solid wastes
   e. Vector control

Key: c

3. The approach of rapidly classifying the injured on the basis of severity of their injuries and likelihood of their survival with prompt medical intervention after disaster is called as:
   a. Search, rescue and first aid
   b. Field care
   c. Tagging
   d. Rehabilitation
   e. Triage

Key: e

4. After an earth quake disaster in "Bala Kot" many camps were laid for the effected people. The latrine of choice for camps of short duration is:
   a. Aqua privy

b. Trench hole
c. Pit latrine
d. Chemical closet
e. RCA latrine

Key:

Entomology

1. A mother noticed that her 3 year old boy recently admitted in play group class at Lahore grammar school was scratching his scalp for the last one week. While combing his hair she noticed small white ovoid nits. The most effective treatment for this condition is use of topical solution containing:

a. 0.05 % malathion
b. DDT
c. HCH
d. Mineral oil
e. Paris green

Key : True: a

2. A medical officer working at BHU in the periphery of Balauchistan noticed that most of the people presented with painful cutaneous ulcers on the exposed parts of the body. Almost all of them gave history that it started as a granular nodule after some insect bite. The medical officer realized that they had been bitten by:

a. Aedes Aegypti
b. Phelbotomus
c. Xenopsylla cheopsis
d. Ornithotorous Moubata
e. Glossinae palpalis

Key: b

3. A man reports with fever and rigors; chills and lethargy: His blood CP is positive for crescent like structures related to a parasite involved in the above picture: Which arthropod comes to your mind as a transmitter of this disease:

a. Mosquito
b. Louse
c. Tick
d. Mite
e. Flea

Key: a

HOSPITAL WASTE

1. A hospital wants to set up a method for sage disposal of infectious waste. They have enough expenses what should e the best option for them?

a. Single chamber incinerator
b. Double chamber Paralytic incinerator
c. Microwave irradiation

d. seven feed technology
e. Chemical disinfection

Key: b