1. A married couple with two children comes to you for advice on contraception. They want long term contraception for four to five years. The man is not motivated for using any contraceptive method; the wife aged 35, has been a known hypertensive for many years:
   a) Which type of CONTRACEPTIVE METHOD would you advice for this lady? 1
   b) How would you COUNSEL the woman regarding the use of this method? 4

2. You are working as a medical officer at a Basic Health Unit. A mother brings her one year old child to you for growth monitoring. His reported birth weight is 3 kg and his present weight is 6 kg:
   a) What is your opinion about the weight of this baby? 1
   b) What advice will you give to the mother, keeping the current nutritional status of the baby in mind? 4

3. Public health policy in Pakistan aims at avoiding the underlying reasons for the development of environmental and atmospheric concentration of Sulphur Dioxide (SO₂) to protect the health of people:
   a) Which LEVEL of PREVENTION is applied in this aim of the policy? 1
   b) Enlist the other THREE LEVELS of PREVENTION and FIVE MODES of INTERVENTION. 4

4. A forty year old pottery industry worker presented with complaints of fever and weight loss; he also complained about cough and blood stained sputum. X-ray confirmed fibrosis of lungs and hilar lymphadenopathy:
   a) Which factor in this particular trade has lead to the development of this condition? 1
   b) Which measures do you recommend for prevention of this condition? 4

5. A researcher wanted to study the risk of Peri-natal Mortality (PNM for 100,000 births) caused by maternal anemia during pregnancy and found the following observations:

<table>
<thead>
<tr>
<th>Incidence of PNM /100,000 Births</th>
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<tbody>
<tr>
<td>Among Anemic pregnant women</td>
</tr>
<tr>
<td>Among Non - Anemic pregnant women</td>
</tr>
</tbody>
</table>

   a) Calculate the ATTRIBUTABLE RISK (risk difference) and ATTRIBUTABLE FRACTION (percent). 3
   b) Interpret the result. 2

6. A study was conducted to find out the heights of 10 lady doctors working in the departments of Community Medicine and Pathology. The data obtained were 5.8, 5.6, 5.6, 5.0, 4.11, 5.3, 5.7, 5.4, 5.6 and 5.2:
   a) Calculate the measures of central tendency. 3
   b) Classify different types of variables and categorize the type of variable under study. 2

7. A man is brought to you with history of inadequate dietary intake and signs of thiamine deficiency. Upon further interviewing, he is found to be taking 30 units of alcohol weekly (one unit = 9 gms):
   a) What is your opinion about the quantity of alcohol intake in this person? 1
   b) What SOCIAL and PSYCHOLOGICAL EFFECTS are likely in this person? 4
8. According to a research carried out by the students of Environmental Sciences department, concentration of certain harmful gases was increasing in atmosphere owing to which the surface of earth had become hotter than it was before:
   a) What is this effect called?  
   b) What are the harmful effects of rising temperature of earth?

9. Secretary Health, Punjab has recently inaugurated a health care facility in a small village near Gujranwala. It will provide services to a population of 5,000 – 10,000 in an area of 24 – 40 km:
   a) Categorize this health care facility.  
   b) Enlist the services that will be provided at this center.

10. A 30 year old farmer presented at Basic Health Unit (BHU) with complaints of fever and rigors. His blood film showed ring forms of a protozoal parasite. The medical Officer at the BHU prescribed Chloroquine tablets for four days but he did not respond to the drug and his fever persisted:
   a) What would be the possible cause for this persistent fever?  
   b) Outline measures for prevention of this disease in the given community?

11. In an OPD the doctor identified a child with fever and paroxysmal cough ending in a loud (croup) crowing inspiration. His mother confirmed insidious development of the condition with coryza over the last 10 to 15 days. The child had been going to school off and on during this period:
   a) What is the likely diagnosis?  
   b) What measures should be taken to control disease spread among his school contacts?

12. A research was conducted in obstetrics department regarding the effects of nutritional status of pregnant women on their deliveries and outcomes. It was observed that 60% of women who presented during pregnancy with pallor, palpitations and dyspnoea on exertion; developed complications at the time of delivery and their babies were below 2.5Kg of weight at birth:
   a) Which nutritional condition is hinted by the signs in these pregnant women?  
   b) Suggest measures to decrease the prevalence of this condition among pregnant women?

13. A 40 year old guard of forestry presented in emergency with a dog bite on his left leg. Physical examination revealed multiple lacerated wounds on his leg with scratches on face and palm. He received a complete course of immunization against rabies last year:
   a) Categorize the INTENSITY OF BITE?  
   b) Give the LINE OF MANAGEMENT?

14. On account of heavy rains during the monsoon season enormous area in Southern Punjab had been flooded. Numerous people became homeless and suffered infections:
   a) Categorize the type of CALAMITY?  
   b) What STRATEGIES should have been adopted by the health and related departments to prevent loss of life and property during and after this catastrophe?