# Museum

# Community Medicine Government Medical College, Surat

# **Preface**

The subject of Community Medicine also referred as Preventive & Social Medicine (P & SM) is learnt by multiple ways such as lectures, tutorials, practical, group discussion, field visits, family studies etc.

The museum has been established in the Community Medicine Department in accordance with MCI guidelines and with an aim to make the medical students understand the various aspects of Public Health and its sub specialties. Entire museum has different segments. These different segments have been adequately covered by two and three dimensional models, charts, equipment, specimens.

I am sure that the visits by the students as planned in the academic timetable and otherwise will be useful to them in acquiring the deep knowledge and understanding of this subject.

The development of museum has been possible only due to the meticulous efforts of the faculty members and other staff members of this department. I would thank one and all staff members including teaching and non-teaching staff in this endeavor.

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List of posters - 15

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# a) LIST OF CHARTS -144

# **INFECTIOUS DISEASE:**

S. No	Details Of charts
1.	Tuberculosis - mode of spread, control & prevention (i)
2.	Tuberculosis - mode of spread, control & prevention (ii)
3.	Polio - mode of spread, control & prevention
4.	Diphtheria
5.	Measles - mode of spread, control & prevention
6.	Influenza
7.	Acute respiratory infection - mode of spread, control & prevention
8.	Rabies - mode of spread, control & prevention
9.	Modes of disease transmission
10.	Necator americanus and Ancylostoma duodenale
11.	Ascariasis lumbericoides (Round worm)
12.	Typhoid fever - mode of spread, control & prevention
13.	Helminths protozoa infesting the human intestine
14.	Acute diarrhoeal disease
15.	Amoebiasis
16.	Acute infectious diarrohea
17.	Transmission of viruses that causes disease
18.	Dengue syndrome
19.	Leprosy

### **ENTOMOLOGY**:

S. No	Details Of charts
1.	Life cycle of mosquito
2.	Life cycle of louse
3.	Life cycle of housefly
4.	Life cycle of malaria prevention & control

### **NUTRITION**:

S. No	Details Of charts
1.	Vitamins - function, source & deficiency (part-1)
2.	Vitamins - function, source & deficiency (part-2)
3.	Iodine deficiency disorders part-1
4.	Iodine deficiency disorders part-2
5.	Iodine deficiency disorders part-3
6.	Understanding type 1 diabetes
7.	Understanding hypertension
8.	Anemia
9.	Vitamin 'a' deficiencies
10.	Balance diets for children & adolescents
11.	Balance diets for pre-school children
12.	Keys to healthy eating
13.	Recommended dietary allowances
14.	Types of fluorosis
15.	Calorie value of common foods
16.	Daily diet for adult suffering from high blood pressure
17.	Diets for diabetic male
18.	Food values of principal Indian types of food and vegetables

19.	Universal access to iodised salt
20.	Iodine testing kit
21.	Area of salt production/ status of ban notification
22.	Janani suraksha yojana

### **IMMUNIZATION:**

S. No	Details Of charts
1.	Breastfeeding & human lactation (1)
2.	Breastfeeding & human lactation (2)
3.	Growth & development of infant (part 1)
4.	Growth & development of infant (part 2)
5.	Nutrition during pregnancy part - 1
6.	Nutrition during pregnancy part - 2
7.	Balance diets & recipes for normal pregnant & lactating women (1 and 2)
8.	Feeding schedule of preterm infants and thumb rule for growth
9.	Normal height and weight table
10.	Immunization schedule
11.	Vaccination schedule
12.	Growth chart

### **CONTRACEPTION:**

S. No	Details Of charts
1.	Contraceptive devices & techniques
2.	Contraceptive devices & techniques part-1
3.	Contraceptive devices & techniques part-2
4.	Std (sexually transmitted disease)
5.	Hormones oral contraceptives
6.	Family planning method
7.	380-a copper-t

### **EPIDEMIOLOGY:**

S. No	Details Of charts
1.	Epidemic curve-1
2.	Epidemic curve-2
3.	Propagated epidemic
4.	Normal distribution curve
5.	Pedigree analysis
6.	Hospital waste management
7.	Hospital waste management
8.	Occupational health chart

### **WOODEN CHARTS**:

S. No	Details of charts
1.	Case control study
2.	Epidemiology concepts
3.	Epidemiology curve
4.	Relation between incidence and prevalence
5.	Incubation period
6.	Skewed distribution
7.	Natural history of disease
8.	Iceberg disease
9.	Double pot method
10.	Adult mosquito mouth part
11.	RCT

### **PEDIGREE CHARTS**:

Sr.	Name	Quantity
No.		
1	Pedigree analysis	1
2	Examination of the new-born from head to toe for common birth defects	1
3	Autosomal dominant	1
4	Autosomal recessive	1
5	X linked dominant	1
6	X linked recessive	1
7	Nuclear family demonstration chart	1
8	Pedigree analysis (laminated charts)	1

9	Sickle cell booklet( Guajarati)	1
10	Down syndrome chart	1
11	Birth certificate (demo)	1

# FIMNCI/IMNCI CHARTS: 20

### **NEW CHARTS: 30**

Sr No.	TITLE
1	Phases of break- point chlorination
2	Environment
3	Five keys to safer food
4	Epidemiology- 1
5	Epidemiology- 2
6	Diabetes
7	Cold chain- 1
8	Cold chain- 2
9	Cold chain- 3
10	National and International days related to Health
11	National history of communicable disease
12	National AIDS Control Program (NACO) evolution
13	Modified Case Definitions- 1 (Diarrhea, Acute Diarrheal Diseases)
14	Modified Case Definitions- 2 (Dengue fever, DHF)
15	Modified Case Definitions- 3 (Acute Encephalitis Syndrome, Meningitis)
16	Modified Case Definitions- 4 (Fever of unknown origin, ARI)
17	Comparison of Clinical trial phases
18	Census 2011

19	Types of contraception
20	Component of National AIDS Control Program
21	Tasty tips for Smarter snacking
22	Natural history of Communicable disease (web of causation for myocardial infarction)
23	Epidemiological basis of HIV surveillance
24	Diagnostic algorithm for extra pulmonary TB
25	RO purification technology
26	RCH
27	Diagnostic algorithm for pulmonary TB
28	Diagnostic algorithm for pediatric Tuberculosis
29	What's in the nutrition label
30	Balanced diet

# b) <u>LIST OF MODELS</u> -25

Sr. No.	Models	Briefing
1.	Slow Sand Filter	<ul> <li>HISTORY: First used in Scotland (1804) and subsequently in England.</li> <li>Rate of filtration is 2-3 m.g.a.d</li> <li>Used for purification of water in small towns.</li> <li>Consists of four parts: Supernatant raw water, a bed of graded sand, an under-drainage system, a system of filter control valves.</li> <li>Works on principal of plain sedimentation.</li> <li>After use for first times, a slimy layer develops on the surface of the sand bed called as vital layer. The event is called "ripening of filter". It removes organic matter, holds back bacteria and oxidizes ammoniacal nitrogen into nitrates and helps in yielding a bacteria free water.</li> <li>Effective size of sand 0.2-0.3 mm.</li> <li>Sand bed is cleaned by "scraping" off the top portion of sand layer to a depth of 1 or 2 cm.</li> </ul>

		• It removes bacteria by 99.9-99.0%
		<ul> <li>It occupies a large area but it easily operated.</li> </ul>
2.	Rapid Sand Filter	• HISTORY: First used in USA (1885).
		• Rate of filtration is 200 m.g.a.d
		<ul> <li>Used for purification of water in big cities.</li> </ul>
		• Rapid sand filters are of two types: (1) <b>Gravity type</b>
		[Paterson's Filter] (2) <b>Pressure type</b> [Candy's filter]
		• Works on principal of coagulation and
		sedimentation.
		• Steps involved in Rapid Sand Filter are: (1)
		Coagulation (2) Rapid Mixing (3) Flocculation (4)
		Sedimentation (5) Filtration
		• Effective size of sand 0.4-0.7 mm.
		• Here <u>no vital layer</u> is present, but the "alum-floc" not
		removed by sedimentation is held back on sand bed.
		This absorbs bacteria and effects purification and is
		comparable to vital layer in case of slow sand filter.
		• Cleaning of sand bed is done by reversal of water flow
		causing dislodging of impurities. This is called "back-
		washing"
		It removes bacteria by 98-99%  It coopyries yeary little space, con deal with row water.
		• It occupies very little space, can deal with raw water directly but higher skills are required to operate it.
		uncerty out higher skins are required to operate it.
3.	Chulha	• A kitchen stove, often made of <b>earth or bricks</b>
		stacked together in shape of cuboid with an opening
		for fuel at one side and open top for use.
		• Fuels generally used are twigs, coal, dry wood.
		It is used in villages and also in urban slums.
		• Indoor air quality is the quality of air within and
		around buildings and structures.
		• It causes <u>Indoor Air Pollution</u> .
		• It releases the harmful gases which causes respiratory
		problems like Asthma, bronchitis, COPD etc
		• It emits a number of harmful gases including carbon
		monoxide which aided by improper ventilation and
		<ul> <li>overcrowding causes a higher risk of <u>Lung carcinoma</u></li> <li>People in villages believe that use of chulha makes the</li> </ul>
		food pure and increases its nutrient value, because of
		this <b>misbelief</b> it has tough to eliminate this factor
		completely.
		completely.

		• <u>Ujiwala Yojana</u> of free cooking gas (LPG) for poor
		households has been implemented by Ministry of
		Petroleum and Natural Gas by Indian Government.
4.	Autoclave	Sterilizers which operate at high temperatures(in)
7.	Autociave	excess of 100 def C) and pressure are called
		autoclaves.
		<ul> <li>Autoclaves.</li> <li>Autoclave Sterilizers are used to decontaminate</li> </ul>
		certain biological waste and sterilize media,
		instruments and lab ware.
		• E.g. It is used for sterilization of contaminated waste, sharp waste, glassware.
		<ul> <li>Regulated medical waste that might contain bacteria,</li> </ul>
		viruses and other biological material are
		<u> </u>
		recommended to be inactivated by autoclaving before disposal.
		<ul><li>Principle: Steam under pressure-(saturated steam)</li></ul>
		which is most effective sterilizing agent.
		viruses, autoclaves need to have steam in direct
		contact with the material being sterilized (i.e. loading
		of items is very important).
		• The efficiency of the sterilization process depends on
		two major factors. One of them is the thermal death
		time, i.e. the time microbes must be exposed to at a
		particular temperature before they are all dead. The
		second factor is the thermal death point or
		temperature at which all microbes in a sample are
		killed.
		• Temperature- 121 deg C under 15 lbs /sq.inch
		Mode of Action Autoclave Sterilizers:
		Moist heat destroys microorganisms by the
		irreversible coagulation and denaturation of enzymes
		and structural proteins. In support of this fact, it has
		been found that the presence of moisture significantly
		affects the coagulation temperature of proteins and
		the temperature at which microorganisms are
		destroyed.
		Uses-It is most effective method for sterilization of
		linen, dressings, gloves, syringes, certain instruments
		and culture media.
		• It is not suitable for sterilization of plastics and sharp
		instruments.
		Efficacy of Autoclaving checked by
		stearothermophilus bacillus.
5.	Sanitary Latrine	• It is non service type latrine.
		Criteria of sanitary latrine-

	1	T
		1. Excreta should not contaminate the ground or surface water.
		2. Excreta should not pollute the soil
		3. Excreta should not be accessible to flies, rodents, animals
		(pigs, dogs, cattle, etc.) and other vehicles of
		transmission.
		4. Excreta should not create a nuisance due to odour or
		unsightly appearance.
		<ul> <li>It has water seal trap which prevents access by flies</li> </ul>
		<ul> <li>Trap acts as a water seal barrier. It is a bent pipe,</li> </ul>
		about 7.5cm (3 in.) in diameter and is connected with
		pan. It holds water and provides the necessary water
		seal.
		<ul> <li>The water seal is the distance between the level of</li> </ul>
		water in trap and the lowest point in concave upper
		surface of the trap.
		Different types of sanitary latrines-borehole latrine,
		dug well latrine, water seal latrine.
6.	Salter Weighing	• It is used for monitoring of growth of child at
	Machine	Anganwadi
		<ul> <li>Used for children 1-5 years</li> </ul>
		<ul> <li>It is provided by UNICEF</li> </ul>
		• It records and monitors the growth of child at
		periphery centers
		• The spring hanging scale (SALTER) is commonly
		used for taking weight of children 1-5 years.
		<ul> <li>It is provided by UNICEF.</li> </ul>
		<ul> <li>This scale can weigh up to 25 kg and is graduated by</li> </ul>
		0.1kg (100g) increments.
		9 ' 9'
		• Steps for taking the weight of a child using Salter Scale:
		1. Hook the scale to a tripod or a stick held horizontally by two
		people at eye level.
		2. Suspend the weighing pants from the lower hook of scale
		and readjust the scale to zero.
		3. Undress the child and place him/her in the weighing pants.
		4. Hook the pants to the scale. When child is settled and the
		weight reading is stable record the weight to the
		nearest 100gms.
		5. Make sure that nobody touches the pants or the scale during
		weighing. Ensure that the child hangs freely without
		holding onto anything.
		6. Read and announce value from the scale. The assistant
		should repeat value for verification and record it
		immediately.

that may escape filtering by the reverse osmosis	7.	Reverse Osmosis Water System	<ul> <li>It is used for monitoring of growth of child a Anganwadi.</li> <li>It records and monitors the growth of child a periphery centers.</li> <li>Early detection of malnutrition at periphery centers like anganwadi is possible with this Salter weighing scale and early referral of children is possible.</li> <li>It is used for purification of water at house and industries</li> <li>It produces treated water stream and relatively concentrated water stream</li> <li>Uses a semi permeable membrane to remove ions molecules and larger particles from water</li> <li>In reverse osmosis, an applied pressure is used to overcome pressure, that is driven by chemical potential differences of the solvent.</li> <li>Reverse osmosis can remove many types of dissolved and suspended chemical species as well as biological ones (principally bacteria) from water, and is used in both industrial processes and the production of potable water.</li> <li>The result is that the solute is retained on the pressurized side of the membrane and the pure solvent is allowed to pass to the other side.</li> <li>Household RO units use a lot of water because they have low back pressure so they recover only 5 to 15% of water</li> <li>Drinking water purification steps involved following:</li> <li>sediment filter to trap particles, including rust and calcium carbonate</li> <li>a second sediment filter with smaller pores</li> <li>An activated carbon filter to trap organic chemicals and chlorine, which will attack and degrade a thin film composite membrane</li> <li>A reverse osmosis filter, which is a thin film composite membrane</li> <li>Optionally, a second carbon filter to capture those chemicals not removed by the reverse osmosis membrane</li> <li>An ultraviolet lamp for sterilizing any microbes</li> </ul>
8. <b>Infantometer</b> • It is used to measure the length of infant	8.	Infantometer	that may escape filtering by the reverse osmosis membrane.  • It is used to measure the length of infant • Adv - easily transportable and flexible, durable and

To monitor the growth of an infant at periphery centres. • It has one fixed end and other end can be adjusted to the baby's foot area • Check that the child lies straight along the board and does not change position. Shoulders should touch the board, and the spine should not be arched. Ask the mother to inform you if the child arches the back or moves out of position. Hold down the child's legs with one hand and move the footboard with the other. Apply gentle pressure to the knees to straighten the legs as far as they can go without causing injury. • While holding the knees, pull the footboard against the child's feet. The soles of the feet should be flat against the footboard, toes pointing upwards. • If the child bends the toes and prevents the footboard from touching the soles, scratch the soles slightly and slide in the footboard quickly when the child straightens the toes. Read the measurement and record the child's length in centimetres. **Rat Trapper** It is used to catch the rats Rat traps are usually set in an indoor location where there is a suspected infestation of rats. • Rat traps are of lethal and non lethal type. Types: 1. Rat cage trap - Non lethal It is metal cage box shaped device to catch the rats without killing them. When an animal enters the cage and moves toward the bait, the mechanism triggers and closes a door over the entry point. The animal is caught alive and without injury. 2. Glue rat trap - Non lethal 3. Victor electric rat trap - Lethal 4. Spring rat trap - Lethal 5. Bucket rat trap - Non lethal or

10	Anemia Detection	Lethal 6. Disposable rat trap – Non lethal 7. Good nature A24 – Lethal (kill by CO2 powdered piston, self resetting) • Food bait is put in the cage trap in rat cage trap. • Rats spread the diseases like plague, leptospirosis, rat bite fever etc. • It is used to detect iron deficiency for general public.
	Chart	Person has to see in mirror and compare his color of tongue
		or oral mucosa with that of chart.
		Anemia can be due to iron deficiency due to worm
		infestation, chronic blood loss etc.
		• RDA of iron is 30 mg.
		<u> </u>
11.	Sand Filter	Used as a step in the water treatment process of water
	Model	purification.  ☐ Three main types:
		<ul><li>Rapid (gravity) sand filters</li></ul>
		<ul><li>Upward flow sand filters</li></ul>
		<ul> <li>Slow sand filters</li> </ul>
		☐ The first two require the use of flocculent chemicals to
		work effectively while slow sand filters can produce very
		high quality water with pathogens removal, taste, odour
		without the need for chemical aids.
		☐ Use: water treatment plants, water purification in singular
		households as they use materials which are available for
10		most people.
12.	Water Testing	It is called horrock's apparatus  It is used to find out the dose of bleeching poyuder.  It is used to find out the dose of bleeching poyuder.
	Field Kit	<ul> <li>It is used to find out the dose of bleaching powder required for disinfection of water</li> </ul>
		☐ Contents- a. 6 white cups,
		b. 1 black cup,
		c. 2 metal spoons
		d. 7 glass stirring rods
		e. One special pipette
		f. Two droppers
		g. Indicator: starch iodide solution
		• Procedure:
		• Take one level spoonful (2g) of bleaching powder in
		the black cup and make it into a thin paste with a little
		water. Add more water to the paste and make up the volume up to the circular mark with vigorous stirring.
		Allow to settle .This is the stock solution.
		<ul> <li>Fill the 6 white cups with water to be tested, up to</li> </ul>
		<u> </u>
		about a cm below the brim.

		<ul> <li>With the special pipette provided add one drop of the stock solution to the 1 st cup, 2 drops to the 2 nd cup, 3 drops to the 3 rd cup, and so on Stir the water in each cup using a separate rod.</li> <li>Wait for half an hour for the action of chlorine.</li> <li>Add 3 drops of starch iodide indicator to each of the white cups and stir again. development of blue colour indicates the presence of free residual chlorine.</li> <li>Note the first cup which shows distinct blue colour. Supposing the 3 rd cup shows blue colour, then 3 level to disinfect 455 litres of water.</li> </ul>
13.	Breeding Places Of Mosquitoes	<ul> <li>Anopheles- fresh water or salt-water, vegetative or non-vegetative, shady or sunlight. Ground pools, small streams, irrigated lands, freshwater marshes, forest pools, and any other place with clean, slow-moving water.</li> <li>Aedes- artificial collections of water like in tires, barrels, plastic drums, jerricans, mud pots, flower pots, discarded sinks, buckets, plastic bowls, dustbins, polythene sheets, and discarded excavator pot, abandoned tyres, shells of coconut, AC trays etc.</li> <li>Culex- dirty, polluted water like in blocked drains, cesspits, rainwater barrels, catch basins, storm drains, and septic tanks are rich in organic material etc.</li> <li>Mansonia- ponds and lakes containing certain aquatic plants, especially the floating type like Pistia stratiotes and water hyacinth.</li> </ul>
14.	<b>Prevention And</b>	Environment control- is best approach for vector control
	Control Of	1. Anti adult measures
	Malaria	Residual spraying: use of insecticides like Malathion, parathion, fenitrothion sprays, DDT spray and insecticide treated bed nets.  Space application: involves application of pesticides in the form of fog or mist using special equipment.  Individual protection: repellents, bed nets, mosquito coils, screening of houses etc.  1. Anti larval measures  Larvicides: Oiling the collection of standing water or with paris green.  Source reduction: drainage or filling, deepening or flushing, management of water level, changing salt content of water.  Integrated control: Bioenvironmental+ personal protection measure.  Biological control- use of parvovirus fishes like Gambusia affinis, Leister reticulates.  Early diagnosis and treatment.

<ul> <li>Spread Of         Malaria</li></ul>	n
transplant, congenital malaria, in drug addicts.  Signs and symptoms- fever with chills, headache, shivering, sweating, malaise and muscle pains.  Mainly from droplet infection and droplet nuclei  Annually average of 10-15 persons contract the infection from 1 infected person  World TB Day- 24th march  Probability of Transmission of M. tuberculosis is determined by immune status of exposed individual Number of bacilli expelled by infected person in tair, proximity frequency and duration of exposure.  Features associated with increased infectiousness	
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Features associated with increased infectiousness	ne
1 0 1 1 1 0 1	
1. Cough, lasting longer than 2 weeks.	
2. Inadequate treatment (drug, duration).	
3. Respiratory tract disease, larynx (highly infectious).	
4. Cavitation seen on chest x-ray.	
5. M. tuberculosis positive culture.	
• Environmental factors to enhance transmission:	
1. Small and enclosed spaces.	
2. Inadequate ventilation 3. Air recirculation	
17 <b>Cholera Mode Of</b> • Acute diarrheal disease, kills within hours if untreasured in the second of	tad
	icu
<ul><li>Spread</li><li>Transmission via contaminated water and food.</li><li>Cholera outbreak can be seasonal or sporadic.</li></ul>	
<ul> <li>Cholera transmits due to inadequate access to clea</li> </ul>	n
water and sanitation facilities.	
At risk areas are peri urban slums, refugee camps.	
During disasters and crisis causing disruption of	
water supply and sanitation system leads to increase	ed
transmission of cholera.	
<ul> <li>Prevention by surveillance, water and sanitation,</li> </ul>	
hygiene, social mobilization.	
Cholera cases are detected based on clinical	
suspicion in patients who present with severe acute	;
watery diarrhoea.	
• The suspicion is then confirmed by identifying V.	
cholerae in stool samples from affected patients.	
• Test- Rapid diagnostic test.	
It is a notifiable disease.  Treatment ODS thereasy and antibiation	
• Treatment – ORS therapy and antibiotics.	
Both an endemic and epidemic disease.	
18 <b>Hookworm</b> • Includes Ancyclostoma duodenale and Nector	
Americanus.	

		<ul> <li>Soil transmitted helminth (parasitic worm).</li> <li>Hookworms live in the small intestine.</li> <li>Hookworm eggs are passed in the feces of an infected person.</li> <li>When the infected person defecates outside (near bushes, in a garden, or field) or when the feces of an infected person are used as fertilizer, eggs are deposited on soil. They can then mature and hatch, releasing larvae (immature worms).</li> <li>Mode of transmission – The larvae mature and penetrate the skin of humans.</li> <li>Hookworm infection is mainly acquired by walking barefoot on contaminated soil.</li> <li>Symptoms: Mainly gastrointestinal symptoms. The most serious effects of hookworm infection are blood loss leading to anemia, in addition to protein loss.</li> <li>Reservoir- man</li> <li>Treatment- Albendazole, Mebendazole. + Iron Supplements.</li> <li>Diagnosis- by identifying hookworm eggs under microscope.</li> <li>Chandler's index &amp; gt;300 is important public.</li> </ul>
19	Tracking bag	<ul> <li>It is a new innovation in India.</li> <li>It is a cloth bag, composed of fourteen pockets.</li> <li>It is one simple tool developed for follow up of beneficiaries through the filling of counterfoils from immunization cards.</li> <li>Twelve pockets in the bag indicate the months of the year. Counterfoils are filed into the pocket indicating the month when the next vaccine is due.</li> <li>The thirteenth pocket is used for counterfoils of beneficiaries who have left the area or died.</li> <li>The fourteenth pocket contains counterfoils of fully immunized children.</li> <li>Before the session, the health worker prepares a list of beneficiaries due on that day, based on the counterfoils in the pocket for that month. This list is then shared with the AWW or ASHA. As the children come for vaccination, their cards and counterfoils are updated, with the counterfoils moved to the pocket for the month when the next vaccination is due.</li> <li>At the end of each month, cars and counterfoils remaining behind represent drop outs to be followed up.</li> </ul>

20 Surat map	<ul> <li>Used correctly, these bags also have the advantage of reducing the workload of mobilizes. With a precise list of due beneficiaries, they can focus on visiting the 15 or so families, on average, that are due for vaccinations in next session.</li> <li>Surat has population of 44.6 lacs.</li> <li>Tapi river flows through Surat.</li> <li>Literacy rate of Surat is 86.65% and sex ratio is 787/1000.</li> <li>Hazira port of Surat is used for trade purpose and Dumas beach is used for tourism. Surat is located in south part of Gujarat.</li> <li>Surat is the 2<sup>nd</sup> largest city in Gujarat.</li> <li>Surat has an area of 327km².</li> <li>Surat has 9 blocks: Kamrej, Mahuva, Umarpada,</li> </ul>
	<ul> <li>Palsana, Chorasi, Olpad, Bardoli, Mandavi and Mangrol.</li> <li>Surat corporation consists of 8 zones: East zone-A, East zone-B, West zone, Central zone, North zone, South zone, South east zone and South west zone.</li> <li>Government Medical College, Surat is located in South west zone of Surat municipality.</li> </ul>
21 The Male Reproductive System	<ul> <li>The chart shows male reproductive system showing testis, epididymis, vas deferens, ejaculatory duct.</li> <li>By the 10<sup>th</sup>-12<sup>th</sup> week of Intra uterine life, genitalia start development and at 16 weeks post conception, the genitalia are formed and distinct.</li> <li>Androgenic effect in embryonic organs is mediated by Dihydro Testosterone (DHT) which is a product of testosterone after effected by 5 alpha reductase</li> <li>Testes descend into scrotal sac by sixth to 10<sup>th</sup> week, failure to which causes "Undescended Testes"</li> <li>Most boys begin puberty between the ages 9 to 14 characterized by growth spurts, facial hair, voice change etc.</li> <li>Permanent sterilization process for male is known as Vasectomy.</li> <li>Recently, Non-Scalpel Vasectomy is done under National Health Program.</li> <li>Vasectomy comprises of nicking the vas deferens, followed by folding and tying the ends.</li> <li>NSV as a male sterilization under project is funded by UNFPA.</li> <li>Proper hygiene, safe sex practices and improved knowledge, attitude and practice about male</li> </ul>

	The Female Reproductive System  Application And	reproductive system can reduces rate of spread of various STDs like Gonorrhea, AIDS etc.  • The model shows female reproductive system including ovaries, fallopian tubes, uterus, vagina and vulva.  • In human the female reproductive system is immature at birth and develops to maturity at puberty to be able to produce gametes, and to carry a fetus to full term.  • Puberty usually occurs in girls between the ages 10 and 14 years.  • Fertilization usually occurs in the Fallopian tubes and marks the beginning of embryogenesis.  • Most women reach menopause between the ages of 45 and 55 years.  • Unintended pregnancy is a major women's health problem. So, contraception is necessary.  • Barrier contraceptive devices like female condom, vaginal sponge, diaphragm is placed in vagina.  • It is important to have proper understanding of female reproductive system to maintain menstrual hygiene.  • Vaginitis is inflammation of the vagina and largely caused by infection. It is most common gynecological condition presented.
	Proper Placement Of Copper T	<ul> <li>System.</li> <li>Cu t 380a is used under national family welfare program.</li> <li>Pregnancy rate for cut 380a is 0.5-0.8.</li> <li>Timing of insertion-during menstruation or within 10 days of beginning of menstrual period, postpartum period, post puerperal insertion.</li> </ul>
24.	House Drainage System	<ul> <li>Septic tank is used for household sewage treatment.</li> <li>Steps of purification- anaerobic digestion and aerobic oxidation.</li> <li>Ideal retention period- 24 hours.</li> <li>Desludging should be carried out once a year.</li> </ul>
25.	Modern Drainage System (Sewage Treatment Plant)	<ul> <li>Primary treatment: screening-&gt; grit chamber-&gt; primary sedimentation.</li> <li>Secondary treatment: aerobic oxidation-&gt; secondary sedimentation-&gt; sludge digestion.</li> </ul>

# c) <u>List of Specimens</u> -119

# **Nutrition:**

S. No	Specimen	
1.	Wheat	
2.	Rice	
3.	Maize	
4.	Jowar	
5.	Bajara	
6.	White gram( Kabuli chana )	
7.	Cow peas( Chola )	
8.	Black gram without covering	
9.	Bengal gram – whole	
10.	Bengal gram - Channa dal	
11.	Red gram	
12.	Green gram	
13.	Green gram whole	
14.	Phenugreek( Methi )	
15.	Raagi	
16.	Milk powder	
17.	Iodized Salt	
18.	Salt testing kit	
19.	Balbhog	
20.	Balbhog candy	
21.	Folic Acid Tablets	
22.	Zinc Tablets	
23.	Ferrous acid syrup	
24.	Peanut	
25.	Cooking Oil	
26.	Vitamin A syrup	
27.	Vitamin A Capsules	
28.	Almond	
29.	Cashew nut	
30.	Soya bean	
31.	Egg	
32.	Curd	
33.	Jaggery	
34.	Cheese	
35.	Sabudana Mathalana Phas Salatian	
36.	Methelene Blue Solution	

# **Contraception:**

S. No	Specimen
1.	Urine Pregnancy Test Kit (Nishchay)
2.	Nirodh
3.	Mala N tablets
4.	Mala D tablets
5.	Copper T with equipped devices
6.	Mamta Card
7.	Emergency Contraceptive Pill
8.	Female Condom
9.	Sims speculum
10.	Anterior vaginal wall retractor
11.	Chitteles forceps

# **Reproductive and Sexual Health:**

S. No	Specimen
1.	Syndromic Case Management of STI/RTI cases Kit 1
2.	Syndromic Case Management of STI/RTI cases Kit 2
3.	Syndromic Case Management of STI/RTI cases Kit 3
4.	Syndromic Case Management of STI/RTI cases Kit 4
5.	Syndromic Case Management of STI/RTI cases Kit 5
6.	Syndromic Case Management of STI/RTI cases Kit 6
7.	Syndromic Case Management of STI/RTI cases Kit 7
8.	Penis model
9.	FDC Lamivudine+ Zidovudine
10.	FDC Tenofovir + Lamivudine
11.	FDC Abacavir + Lamivudine
12.	FDC Lamivudine + Neverapine+ Zidovudine
13.	FDC Zidovudine + Lamivudine
14.	FDC Lopinavir + Ritonavir
15.	FDC Efavirenz
16.	FDC Efavirenz + Lamivudine + Tenofovir
17.	FDC Atazanavir + Ritonavir
18.	Tab Nevirapine

# **Occupational:**

S. No	Specimen
1.	Snellen`s Chart
2.	Ischierra Chart
3.	Road Traffic Accidents Photographs & Safety Measures

4.	Ear muffs
5.	Safety helmets
6.	Gum boots
7.	Dusk mask
8.	Safety goggles
9.	Latex hand gloves
10.	Doctor gloves
11.	Face mask
12.	N95 respirator mask
13.	Seat belt
14.	Stones causing dust related occupational disease

# **Environment:**

S. No	Specimen
1.	Chloroscope kit
2.	Horrock's Apparatus
3.	Chlorine tablets
4.	Bleaching powder
5.	Environmental thermometer
6.	Vishwachem's kit ( two in one apparatus for estimating Chlorine demand and assessing total residual chlorine)
7.	Puro Water Filter
8.	Autoclave
9.	Wet and Dry Hygrometer
10.	Maximum- Minimum Thermometer
11.	Mercury Thermometer

# **Immunization**

S. No	Specimen
1.	OPV
2.	Measles vaccine
3.	IPV vaccine
4.	BCG vaccine
5.	Pentavalent vaccine
6.	DPT vaccine
7.	Hepatitis B vaccine
8.	TT vaccine
9.	ARV
10.	0.5 ml AD syringe
11.	0.1 ml Tuberculin syringe
12.	Vaccine Carrier

13.	Ice packs
14.	Vitamin A syrup
15.	Hub Cutter
16.	Electronic Syringe destroyer
17.	Vaccine tracker bag
18.	Weighing scale
19.	Hypodermic syringe
20.	Hypodermic needle

#### **Drugs**:

1.	Paracetamol Syrup
2.	Co-trimoxazole Syrup
3.	Anti -Leprosy Dugs
4.	Gentian Violet
5.	Anti -Retroviral Therapy
6.	Anti-tubercular drugs (CAT-1 Old regimen)
7.	Anti-tubercular drugs (CAT-2 Old regimen)
8.	Anti-tubercular drugs (CAT-1 New regimen)
9.	Anti-tubercular drugs (CAT-1 New regimen)

#### d) <u>List of Posters -</u>15

- 1) WHO Reference weight for length and weight for height (>87 cm)
- 2) WHO Reference weight for length and weight for height (<87 cm)
- 3) Management algorithm for treating acute asthma in a hospital
- 4) Volumes of starter formula per feed
- 5) Chart for Basic Life Support
- 6) Chart: Triage
- 7) Fluid requirement and feeding schedule in young infants
- 8) Flow chart for neonatal resuscitation.
- 9) Guidelines for initiation of phototherapy in neonatal hyperbilirubinemia.
- 10) Steps in the management of sick young infants and children admitted to hospital
- 11) Diets recommended in severe acute malnutrition
- 12) Management of severe acute malnutrition in hospital
- 13) Management of shock in a child with severe acute malnutrition
- 14) Checklist for young infant care T.A.B.C.F.M.F.M.C.F
- 15) Management of shock in child without severe acute malnutrition

#### e) Stations kept at Museum-

#### Station 1 Survey methods, sampling design and randomization

This model is made up of a number of sampling unit fitted or placed on a fixogram board having a large number of similar sized holes. This wooden board may be considered as sampling frame and the different objects kept n it become sampling units. This board may be taken as a village or a municipal ward or even a region or a country depending upon the need of explaining a number of survey methods, sampling techniques and calculation of probability. Homogenous or a heterogeneous localities or clusters may be demonstrated using this model and actual sampling of HHs may be carried out using random numbers and a specific sampling methods. This board or a sampling frame is so flexibly used that you may create additional land marks or may rapidly change the scenario for a multiphase sampling methods. The 15 filled containers attached to this model are the 15 clusters and these may be made homogenous or heterogeneous by shuffling the contents of these containers. In fact this board may be used for a variety of purposes like organizing vaccination sessions in an effective manner, conducting an active or a passive surveillance for any condition, conducting a case control study and demonstrating the schemes for recruitment of participants for CT or RCT.

The same model may be conceptually used for showing a variety of barriers like topographical, geographical, linguistic and ethnic, cast and religious, socio economic and so on.

I understand that all of above concepts can be shared virtually on ppt also and may be in a better manner but such a physical model may make teacher self-reliant while conducting such sessions. Similarly it may be a supplementary to the actual visit to the area for actually carrying out the task. I know that it is not easy to do or demonstrate whatever is written above bit this is one way of strengthening skill in epidemiology especially for post graduate education.

Station 1 Randomization and epidemiology charts

Station 1 Randomization and epidemiology charts	No
Black board With Alphabets	1
Marbles	20
Iron plates	5
Ceramic plates	4

Small Wooden boxes		10+
Plastic tubes	Plastic tubes	
Charts of epidemic and its	Charts of epidemic and its type	
Charts of spot map		1
Epidemic Curve chart		3
	Katori's	8
	Discarded empty IFA bottles	20+
	Iron tray	2
	Plastic caps	10+
	Specimen board	2

# **Station 2 Personal protective equipment's**

Personal protective equipment's station			
Sr.no.	Name	Quantity	
1.	Gloves	3	
2.	Protective gowns	2	
3.	Head phones	3	
4.	Glasses	4	
5.	Masks	4	
6.	Head cover	1	
7.	Head gear	1	
8.	Face shield	3	
9.	N95 mask packets	1	
10.	PPE kit	3	

### **Station 3 IMMUNIZATION & AEFI**

Sr.No	Topic	Quantity
1	ILR(Ice-Lined Refrigerator	1
2	ILR information chart	1
3	Vaccine Carrier	4
4	Puncture proof container	1
5	Disposable syringes and needle 5cc, 2cc, 0.1 cc, Insulin syringe	5
6	Laminated chart- immunization schedule	1
7	IDSP Oct 2018 booklet	1
8	Deep freezer	1

9	Immunization Schedule	1
10	Breast Feeding and human lactation I	1
11	Breast Feeding and human lactation II	1
12	Feeding schedule of pre-term infants & thumb rules for growth	1
13	Growth and development of infant birth to 1 year	1
14	Vaccine wheel	10
15	BCG	5
16	HEP B	5
17	OPV	10
18	PENTAVALENT	5
19	ROTA	10
20	MR	10
21	IPV	5
22	PNEUMOCOCCAL	5
23	DPT	5
24	TT	5
25	VITAMIN A	5
26	COVAXIN	5
27	COVISHEILD	5
28	ARV	5
29	AEFI Kit	2
30	Model anti rabies clinic	1

### **Station 4 Contraception**

Serial No.	Objects	Quantity
1	Condom Vending Machine	1
2	Charts for STDs	5
3	Wooden model for female reproductive system	1
4	Wooden model for male reproductive system	1
5	Model for Natural Contraception	2
6	Wooden model for application and proper treatment for CU-T	1
7	CU-T insertion instruments tray	1
8	CU-T	70
9	Jar with CU-T	3
10	Conventional OC Pills	40 Packets
11	Progesterone only Pills	2 Packets
12	Condom	10 big Packets containing 100/Packet
13	Model for demonstration of condom use	1
14	Charts for family planning methods, contraceptive devices and techniques	4
15	Charts for STI management	1

16	Chart booklet on HIV/STI/RTI	1
17	Magazines on The Environmental Population Growth	20
18	Files and Magazines on Contraception	2
19	Pregnancy test kit box	50 tests

#### **Station 5 Newborn Care**

Serial No.	Objects	Quantity
1	Weighing scale for newborn	1
2	Length scale for newborn	1
3	Radiant heat warmer	1
4	Oxygen humidifier	1
5	Steam inhaler	1
6	RT, Feeding tube	2
7	NS Pint	1
8	Newborn Delivery Pack (For Single use only)	12

# **Station 6 Nutrition**

Sr.No	Name	Quantities
1	Pearl millet	1
2	Chana dal	1
3	Soya bean	1
4	Urad dal	1
5	Jowar	1
6	Wheat	1
7	Masoor dal	1
8	Fenugreek	1
9	Green gram	1
10	Black eyed peas	1
11	Rajma	1
12	Mat bean	1
13	Pigeon dal	1
14	Brown chickpeas	1
15	Fennel seeds	1
16	Tapioca pearls	1
17	Honey	1
18	Castor oil	1
19	Groundnut oil	1
20	Corn oil	1
21	Rice	1
22	Nankhatai	1
23	Cookies	1

24	Jaggery	1
25	Law calorie nutrition for people with	1
	diabetes	
26	Water bottle	1

#### **Station 7 Oral Rehydration therapy**

	Table: ORS	
Sl.No	Items	Quantity
1	Aluminum vessel	1
2	Steel vessel	1
3	Plastic spoons	6
4	Steel lid	1
5	Chlorine tablets	1
6	Glass cup	7
7	Porcelain containers	3
8	Plastic jar	1
9	Plastic cup	1
10	Plastic water bottle	2
11	Steel spoon	1
12	Steel cup	1
13	Cardboard box containing	2
	ORS packets	
14	Plastic box containing ORS	1
	packets	
15	Glass containers of sugar and	2
	salt	
16	Glass beaker	1

# **Station 8** Growth and Development

Sl No	Content	Quantity
1	A poster of Sankalith Bal Vikas Yojana	1
2	Growth chart	3
3	Kwashiorkor and Marasmus chart	1
4	Features of severe PEM	1
5	Making pregnancy and childbirth safe booklet	15
6	Breastfeed advice booklet	30
7	Death certificate	5
8	Birth certificate	5
9	Pedigree charts	15

### Station 9 Bio-medical waste Station

Sr.	Content	Quantity
No	NT II	1
1	Needle syringe destroyer	1
2	Autoclave	1
3	Yellow bin	3
4	Blue bin	1
5	Red bin	1
6	Vessel with petridish and instruments	1
7	White bottle for sharp discard	1
8	Small dish	3
9	Petri dish	15
10	Vinegar bottle	1
11	Tray	1
12	Thermocol tray	1
13	Model for deep burial	1
14	Bottle for inertization	1
15	Battery	2
16	Capacitor	1
17	Chart for hospital waste management	2
18	Bag	1
19	Oven	1
20	Box with 3 bulb	1
21	Yellow Bag	1
22	Red Bag	1
23	Black bag	1

### Station 10 Electric Waste Station

Sr.	Content	Quantity
No		
1	Thermocol Box	13
2	Keyboard	1
3	Remote	1
4	Filter	1
5	Electric wire	1
6	CPU	1
7	Phone charger	1
8	Model for occupational safety	1
9	Exhaust Fan	1
10	Mouse	1
11	Scanner	1
12	Metal Stand	5

### Station 11 Occupational Injuries Station

Sr. No	Content	Quantity
1	Charts for occupational health	6
2	Model for air pollution	1

### **Station 12** Chlorination

Chlorination station		
Sr.no	Name	Quantity
1.	Slow sand filter	1
2.	Rapid sand filter	1
3.	Horrock's box	1
4.	Black bottle for chlorine tablets	4
5.	Alum bottle	1
6.	Chlorine tablets strips	2
7.	Earthen pot with lid (6 litre)	1
8.	Clay pot with lid and glass (13-15 litre)	1
9.	Aqua purifier	1
10.	Chlorine powder	2
11.	Chloroscope	3
12.	Chlorine demand measuring appratus	3
13.	Aluminium net	1
14.	Plastic jug (10 litre)	1
15.	Plastic jug (20 litre)	1
16.	Chlorine liquid bottle	2
17.	Washing hand chart	1

### **Station 13** Entomology

	Entomology Station	
	Table 1	
1	Slidebox Anopheles	1
2	Slidebox Culex	1
3	Slidebox Anopheles egg	1
4	Slidebox larvae	1
5	Microscope large	1
6	Microscope small	5
7	Diesel generating set	1
8	Tyres	2
9	Mosquito control measures poster	2
10	Residual spray	1

	Table 2	
1	Specimen Temiphos	3
2	Specimen Municipal Dustin	1
3	Specimen Insecticide	1
4	Specimen Crude oil & Kerosene	1
5	Overhead tank	1
6	Dirty water	1
7	Coconut shells	1
8	Specimen large water body	1
9	Small tubes	1
10	Specimen edible oil	1
11	Specimen poison	1
12	Specimen Artificial collection of water	1
13	Open water for domestic use	1
14	Malaria IEC manual	1
	Table 3	
1	Poster lifecycle of mosquito	1
2	Slidebox tick	1
3	Slidebox housefly pupae & larvae	1
4	Slidebox Culex eg g	1
5	Slidebox aedes adults	1
6	Slidebox Culex adult	1
7	Slidebox aedes eggs	1
8	Slidebox Sandfly	1
9	Slidebox lice	1
10	Slidebox bedbug	1
11	Slidebox Rat flea	1
12	Microscope	9

# f) List of equipment's -133

# Primary care (Cupboard-3)- equipment's

Sr. No	Object	Quantity
1	Soil Testing kit	3
2	Harpender Caliper	6
3	Digital Sound Meter	4
4	Electric Compact Scale	1
5	Spirometer	1
6	Telephone	1

# Primary care (Cupboard-4) - equipment's

Sr. No	Objects	Quantity
1	Exhaust Fan	4
2	Weighing Machine	5
3	Digital BP monitor	2
4	Haemometer	6
5	Chloroscope	5
6	Vaporizer	1
7	Calculator	1
8	Temperature recorder	5
9	Thermometer	13
10	Hygrometer	4
11	Hypodermic needle box	7
12	Hypodermic syringe box	2
13	Projector bulb	1
14	Spirit lamp	1
15	Dental instrument kit	1
16	Magnifying glass	7
17	Hematocytometer	1
18	Ink bottle	1
19	Glucometer	1
20	Syringe 10ml	44
21	Spirit bottle	1
22	Urine analysis kit	1
23	Face mask	2
24	Face shield	1
25	Dressing kit	1

# **Equipment's-**

1	Adult Weighing Scales (2 digital + 1 Machanical)
2	Adult Weighing Scales (2 digital + 1 Mechanical)
3	Aqua Guard
	Autoclave
4	Chemical Balance
5	Chloroscope with OT Solution
6	Cover slip boxes
7	Dissecting Microscopes
8	Hygrometer Wet & Dry Bulb (Hygrometer)
9	Maximum & Minimum Thermometer
10	Projector Screen
11	Slide boxes
12	Sling Psychrometer
13	Sphygmomanometer
14	Stethoscope
15	LCD Projectors
16	Overhead Projectors
17	White Board
18	Black Board
19	Desktop Computer system with Printer
20	Laptop
21	Domestic refrigerator
22	Horrock's Apparatus (5)
23	Needle Shredder (3)
24	Dissecting microscope (30)
25	Water testing kit (at lab)
26	Sound level meter (5)
27	Clinical thermometer (15)
28	Barometer (1)
29	Herpenter Calliper (6)
30	Slide set for entomology (8)
31	Balance Analytical 200 gm(1)
32	Incubator electric (1)
33	Haemoglobinometer (8)
34	Glucometer (13)
35	Mosquito catching kit(5)
36	Spirometer (1)
37	MUAC tap (15)
38	soil testing kit (2)
39	Pasteur chamber filter (1)
	•

# g) <u>List of spots in museum-</u> 28

# Spot 1.

- Q.1 Mention a name of this food grain
- Q.2 Mention approximate value of calorie, protein and any one specific nutrient available from 100 grams of this food grain.
- Q.3 Mention any two clinical signs or symptoms which usually occurs due to deficiency of a nutrient you mentioned above.

## Spot2.

- Q.1 Mention a name of the nutrient for the supplementation of which this Medicine is prescribed
- Q.2 Mention approximate value of Recommended Daily Allowances of this specific nutrient for an adult healthy male
- Q.3 Mention any two clinical signs or symptoms which usually occurs due to deficiency of a nutrient mentioned above.

## Spot3

- Q.1 Mention a name of this food item
- Q.2 Mention approximate value of calorie, protein and any one specific nutrient available from 100 grams of this food grain.
- Q.3 Mention any two clinical signs or symptoms which usually occurs due to deficiency of a nutrient you mentioned above.

#### Spot4.

- Q.1 Identify this photograph using maximum 4 words
- Q.2 List at least three epidemiological factors, one from each (agent, host and environment) which are associated with causation of condition depicted in this photograph
- Q.3 Give two action points for prevention and control of this condition.

#### Spot5.

Q.1 Mention daily calorie requirement of a healthy adult non pregnant muslim woman, house wife having moderate activity, belonged to lower socioeconomic sector and staying at lane No 6, Rasulabad slum of Surat city. Her BMI is 27 and per capita income is 3000 rupees per month.

- Q.2 Describe one physical activity using 2 messages which can be recommended to her for prevention and control of obesity.
- Q.3 list two services which she can avail from government health centers under Non Communicable disease Control Program.

- Q.1 Mention daily calorie requirement of a healthy but chronic alcoholic adult agricultural labor man, having heavy physical activity, holding valid BPL card and staying at halpati falia of Vanz village field practice area. His BMI is 22 and per capita income is 1000 rupees per month.
- Q.2 Describe one two health and wellness related messages which can be recommended to him for prevention and control of common diseases.
- Q.3 list two services which she can avail from government health centers under any government run welfare program.

## Spot7

- Q.1 Write the contents of this Contraceptive
- Q.2 Give two important messages which are required to be passed to the beneficiary lady to whom it is advised.
- Q.3 Write the failure rate with its unit

#### Spot8

- Q.1 Write the name of this Contraceptive device
- Q.2 Give two important history points which must be ruled out before its insertion in the client which are required to be entered in the check list.
- Q.3 Write four common side effects of this device.

#### Spot9

- Q.1 Write the name of this Contraceptive method
- Q.2 Identify the time interval in which pregnancy would not take place even after sexual intercourse.
- Q.3 Write the failure rate with its unit

- Q.1 Write name of the Pneumoconiosis caused by this dust/ dust producing substance
- Q.2 Name two industries where the cases of this condition occurs.

Q.3 Write two preventive and control measures for this condition

# Spot11

- Q.1 Identify this Personal Protective device
- Q.2 gave two names for industry/sites where it can be used
- Q.3 Name two occupational diseases which can be prevented by it.

- Q.1 List any two contents of AEFI (Adverse Eventer Following Immunization) kit maintained at vaccination sessions
- Q, 2 Write names of two vaccines notorious for AEFI.
- Q.3 Relate any two contents of AEFI kit with two adverse effects for which these will be used.

- Q.1 Classify this vaccine in to either Live or a Killed Vaccine.
- Q, 2 where will you keep it at PHC Vans village for maintaining Cold chain?
- Q.3 Mention its dose in a preterm baby having age of 6 weeks and weight of 3kg.

#### Spot14

- Q.1 In which colored bag/ container will you discard this Biomedical Waste item?
- Q, 2 Mention its category.
- Q.3 Mention its final treatment plans.

# Spot15

- Q.1 How will you will you discard this this solid Waste item as per Gujarat Pollution control board norms?
- Q, 2 Mention its hazards to human health.
- Q.3 Mention its final treatment plans.

#### Spot16

- Q.1 Give a name for this type of chart.
- Q.2 Writer mode of inheritance .
- Q.3 Mention two diseases having this kind of mode of inheritance.

#### Spot17

- Q.1 Identify this insect.
- Q. 2 Mention two diseases transmitted by this insect.
- Q.3 Mention two measures to control diseases transmitted by this insect to humans.

- Q.1 Write the composition of powder in this sachet having WHO formula
- Q, 2 Mention two messages for mother to whom you prescribed it for her child having Diarrhoea with mild dehydration.
- Q.3 what will you do if a 4 year child having diarrhoea with moderate dehydration is not able to drink the solution prepared from this sachet/packet?

- Q.1 Identify this device/equipment used in Occupational Health.
- Q.2 List two Pneumoconiosis for prevention of which this instrument is useful.
- Q.3 Write the mechanism by which it prevents or controls the above mentioned Pneumoconiosis

## Spot20

- Q.1 Identify this instrument used by a Primary health care worker at village level
- Q.2 what is the expected free residual chlorine level at user end? Approximately How much chlorine level is kept at water works level in sutra in ordinary situations?
- Q.3 which solution is used to test measure free residual chlorine? How much amount of solution is dropped in a test tube to perform this test?

#### Spot21

- Q.1 Identify this dose of this medicine/syrup/tablet for a 5 year old child having the deficiency of same
- Q.2 List two clinical symptoms/signs related with above nutrient
- Q.3 Write the name of a national health program/ campaign related with the above nutrient.

## Spot22

- Q.1 Identify this vector Control measure.
- Q.2 List two diseases which can be controlled using this measure.
- Q.3 Write the name of a national health program/ campaign related with the use of above measure.

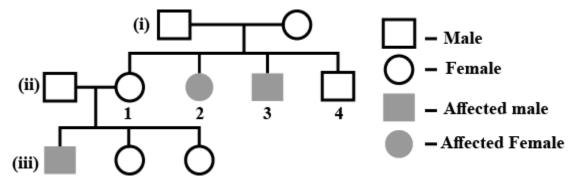
#### Spot23

- Q.1 Identify the insect which can breed in such type of a breeding place.
- Q.2 List two diseases which can be transmitted by the above mentioned insect in humans.
- Q.3 Write two methods to control this insect breeding in such sites

- Q.1 Identify the grade of Malnutrition by plotting weight for age on this chart: Age 18 months Weight: 8kg
- Q.2 List two actions to be taken at Primary Health center level for above child.
- Q.3 Write the name of a national health program/ scheme related with such a child.

- Q.1 You are BHO of a block having population of one lakh with 150 eligible couples per 1000 general population and having 60% rural population and remaining urban population. Couple protection rate is 50 % and 20 percent of it is being contributed by pack of OC Pills over last 3 years. If demography remains stable, how many such packs would be needed per year to sustain the achievements in RCH programme?
- Q.2 Consider the standard failure rate for OCP and predict the number of women who are likely to have unwanted pregnancy following use of OCP as the only method used for contraception.
- Q.3 As a Community Health Physician Would you like to switch over from OCP to Injectable one for contraception? How would you do it in your block over 5 years phase wise?

Spot26



- Q.1 identify this pedigree and mention mode of inheritance here.
- Q.2 Socially and geographically stable and close communities of South Gujarat having various titles like vasava, Chaudhary, gamit, bhagat, rajvadi, bhil, kukana, pavar, deshmukh and some more have around 50 lakhs population in south Gujarat is having a condition known as sickle cell . Will it be possible to make these communities free from sickle cell all together? How would you do it > How long will it take to do so?
- Q.3 What will happen to quality of life of these communities if they are made free from sickle cell?

- Q.1 List the micronutrients with which this food item can be fortified.
- Q.2 Mention the need for fortifying above food items with specific nutrient(s).
- Q.3 List economic and cultural factors which might inhibit community acceptance of such fortified food.

#### Spot28

- Q.1 List names of species of various insects which can breed in this breeding place.
- Q.2 List names of insecticides which may be used to control insect breeding in such sites.
- Q.3 How will one can monitor such breeding sites in urban and rural areas.

# h) Annexure: Photographs of Museum





































Soil Testing Kit



# **Digital Sound Level Meter**



# Harpenden caliper



# Incinerator



# **Biological control methods**

# Anti larval measures



# **COMPOSTING**

