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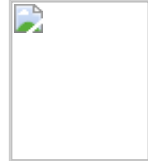
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Exam Date: **08-Oct-2020**Exam Time: **15:00-18:00**Examination: **1. Course Code - M. Tech.;M.P.H.;P.G.****Diploma in Bigdata****2. Field of Study - PUBLIC HEALTH (MPHT)**

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**SECTION 1 - SECTION 1****Question No.1 (Question Id - 36)**

Serial interval is the gap in time between :

- (A) ☒ **Onset of primary case and the secondary case (Correct Answer)**
- (B) ☐ Onset of index case and primary case
- (C) ☐ From infection of one person till she/he infects another person
- (D) ☐ Onset of disease and the person becoming non-infective

Question No.2 (Question Id - 43)Given below are two statements : **Assertion A** and **Reason R**.**Assertion A :**

In most cases stroke is merely an incident in the slowly progressive course of a generalized vascular disease.

Reason R :

Studies have shown that nearly three-quarters of all registered stroke patients had associated diseases, mostly in the cardiovascular system or of diabetes.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☒ **Both A and R are correct and R is the correct explanation of A. (Correct Answer)**
- (B) ☐ Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**.
- (C) ☐ **A** is correct but **R** is not correct.
- (D) ☐ **A** is not correct but **R** is correct.

Question No.3 (Question Id - 27)

Which sample can be used for earliest isolation of poliovirus ?

- (A) ☒ **Stool (Correct Answer)**
- (B) ☐ CSF
- (C) ☐ Blood
- (D) ☐ Sputum

Question No.4 (Question Id - 29)

“Tuberculin conversion” index is considered as one of the best indicators for :

- (A) ☐ Clinical diagnosis of TB
- (B) ☐ Marker of drug resistant TB
- (C) ☒ **Evaluating the tuberculosis problem and its trend (Correct Answer)**
- (D) ☐ Prognosis of a clinical case of TB

Question No.5 (Question Id - 10)

Match the pairs :

List - I	List - II
Indicators of NUHM	Type
A. No. of diabetes cases screened in the city	I. <i>Community Processes</i>
B. No. of ASHAs selected and trained	II. Health system
C. No. of RKS created at UPHC & UCHC	III. RCH services
D. SAM children identified & referred for treatment	IV. NCD

Choose the **correct** answer from the options given below :

- (A) ☐ **A - IV, B - I, C - II, D - III (Correct Answer)**
- (B) ☐ A - IV, B - II, C - I, D - III
- (C) ☐ A - IV, B - III, C - I, D - II
- (D) ☐ A - I, B - III, C - II, D - IV

Question No.6 (Question Id - 79)

The germ theory of disease was given by :

- (A) ☐ **Louis Pasteur (Correct Answer)**
- (B) ☐ Robert Koch
- (C) ☐ Alexander Fleming
- (D) ☐ Edward Jenner

Question No.7 (Question Id - 17)

The biological oxygen demand (BOD) indicates :

- (A) ☐ **Organic matter (Correct Answer)**
- (B) ☐ Bacterial content
- (C) ☐ Anaerobic bacteria
- (D) ☐ Chemicals

Question No.8 (Question Id - 23)

All of the following are included in Vision 2020 for India except :

- (A) ☐ Diabetic retinopathy
- (B) ☐ Glaucoma
- (C) ☐ **Vitamin A deficiency (Correct Answer)**
- (D) ☐ Refractive errors

Question No.9 (Question Id - 90)

Which of the following played the most important role in the modern rise in population of England and Wales post industrial revolution ?

- (A) ☐ **Better availability of food for the people at large. (Correct Answer)**
- (B) ☐ Decline in the incidence and prevalence of infectious diseases due to modern scientific interventions against these diseases.
- (C) ☐ The sanitary movement in England.
- (D) ☐ Setting up of medical facilities on a large scale.

Question No.10 (Question Id - 68)

Given below are two statements :

Statement I:

A Common-source epidemic is one in which exposure to the disease agent is brief and essentially simultaneous, all cases resulting within one incubation period, and a Propagated epidemic results from person-to-person transmission.

Statement II:

An epidemic may be Common-source and then become a Propagated one.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ I is true and II is false.
- (B) ☐ **Both I and II are true. (Correct Answer)**
- (C) ☐ Both I and II are false.
- (D) ☐ I is false and II is true.

Question No.11 (Question Id - 99)

Match **List-I** with **List-II** :

List - I	List - II
Health agencies	Headquarters
A. WHO (World Health Organization)	I. Rome, Italy

B. UNICEF (United Nations Children Fund)	II. New York, USA
C. FAO (Food and Agricultural Organization)	III. Geneva, Switzerland

Choose the **correct** answer from the options given below :

- (A) ☐ A - II, B - III, C - I
- (B) ☐ A - I, B - II, C - III
- (C) ☐ A - II, B - I, C - III
- (D) ☐ **A - III, B - II, C - I (Correct Answer)**

Question No.12 (Question Id - 49)

Given below are two statements :

Statement I :

Epidemiological transition ratio is defined as the ratio of DALYs caused by CMNNDs (Communicable, Maternal, Neonatal and Nutritional Diseases) to those caused by NCDs and injuries.

Statement II :

The higher the ratio, the greater the contribution of NCDs and injuries to a state's overall disease burden.

In light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ Both **Statement I** and **Statement II** are correct
- (B) ☐ Both **Statement I** and **Statement II** are incorrect
- (C) ☐ **Statement I is correct but Statement II is incorrect (Correct Answer)**
- (D) ☐ **Statement I** is incorrect but **Statement II** is correct

Question No.13 (Question Id - 54)

Randomised controlled trials for efficacy of a drug for a disease have as the unit of study :

- (A) ☐ **Patients of the disease (Correct Answer)**
- (B) ☐ Populations of the diseased
- (C) ☐ Healthy people
- (D) ☐ Communities with the disease

Question No.14 (Question Id - 45)

Given below are two statements : **Assertion A** and **Reason R**.

Assertion A :

Accidents are definitely on the rise in India.

Reason R :

There is increasing mechanization in agriculture and rapid increase in vehicular traffic.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ **Both A and R are correct and R is the correct explanation of A. (Correct Answer)**
- (B) ☐ Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**.
- (C) ☐ **A** is correct but **R** is not correct.
- (D) ☐ **A** is not correct but **R** is correct.

Question No.15 (Question Id - 97)

Match **List-I** with **List-II** :

List - I	List - II
Contraceptive	Type of contraceptive
A. Vaginal sponge	I. Subdermal implant
B. Norplant	II. Barrier method
C. NET - EN	III. IUD

Choose the **correct** answer from the options given below :

- (A) ☐ A - IV, B - II, C - III, D - I
(B) ☒ **A - II, B - I, C - IV, D - III (Correct Answer)**
(C) ☐ A - II, B - IV, C - I, D - III
(D) ☐ A - III, B - II, C - I, D - IV

Question No.16 (Question Id - 34)

Which of the following diseases **does not** have a chronic carrier state ?

- (A) ☐ Cerebro-spinal meningitis
(B) ☐ Gonorrhoea
(C) ☒ **Dengue (Correct Answer)**
(D) ☐ Hepatitis B

Question No.17 (Question Id - 98)

Put the mile stones in order of their happening :

- A. Renaming of Family Planning to Family Welfare
B. Department of Family Planning created in Ministry of Health
C. National Rural Health Mission
D. RMNCH + A Strategy

Choose the **correct** answer from the options given below :

- (A) ☐ C, B, A, D
(B) ☒ **B, A, C, D (Correct Answer)**
(C) ☐ B, C, D, A
(D) ☐ A, D, C, B

Question No.18 (Question Id - 28)

Which of the following is NOT true about Tuberculosis and Diabetes ?

- (A) ☐ Diabetes has been shown to be an independent risk factor for TB
(B) ☒ **Diabetes accounts for 10% of all TB and 20% of smear positive TB (Correct Answer)**
(C) ☐ People with diabetes are at higher risk of progressing from latent to active TB
(D) ☐ A large proportion of people with diabetes and TB are diagnosed very late

Question No.19 (Question Id - 32)

Normal life span of an adult mosquito :

- (A) ☒ **About 2 weeks (Correct Answer)**
(B) ☐ Less than 1 week
(C) ☐ 3 - 4 weeks
(D) ☐ 6 - 8 weeks

Question No.20 (Question Id - 22)

Treatment duration for multi-bacillary leprosy is :

- (A) ☐ 9 months
(B) ☒ **12 months (Correct Answer)**
(C) ☐ 28 months
(D) ☐ 24 months

Question No.21 (Question Id - 69)

Given below are two statements :

Statement I:

Natural history of a disease includes the sequence from the time of entry of the disease agent/process and the sub-clinical phase to the clinical and termination by either death, disability or complete recovery.

Statement II:

Natural history of a disease includes the sequence from the time of entry of the disease in the population to tracing the cycles of increase and decline in occurrence of the disease.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☒ **Natural history of a disease traces phases of the disease in individuals and populations. (Correct Answer)**
- (B) ☐ Natural history of a disease traces changes in knowledge about the disease among doctors.
- (C) ☐ Natural history of a disease traces trends in occurrence of the disease.
- (D) ☐ Natural history of a disease traces the evolution of programmes for its control over the years.

Question No.22 (Question Id - 41)

Given below are two statements : **Assertion A** and **Reason R**.

Assertion A :

It is important to have confirmation of a cholera outbreak as quickly as possible.

Reason R :

Once the presence of cholera has been proved, it is necessary to culture stools of all cases or contacts.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ Both **A** and **R** are correct and **R** is the correct explanation of **A**.
- (B) ☐ Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**.
- (C) ☒ **A is correct but R is not correct. (Correct Answer)**
- (D) ☐ **A** is not correct but **R** is correct.

Question No.23 (Question Id - 93)

Given below are two statements : one is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion A :

By the late 1990s privatization was losing much of its earlier momentum, yet concerns about infrastructure remained in many countries. It was at this time that PPPs began to emerge significantly as a means of obtaining private sector capital and management expertise for infrastructure investment, both to carry on where privatization had left off and as an alternative where there had been obstacles to privatization. [MF, 'Public-Private Partnerships', 2004, p 4].

Reason R :

The government has had an active policy in the last 25 years of building a positive economic climate for the health care industry. Among these measures are lower direct taxes; higher depreciation in medical equipment; Income tax exemptions for 5 years for rural hospitals; custom duty exemptions for imported equipment that are lifesaving; Income tax exemption for Health Insurance; and active engagement through publicly financed health insurance which now covers almost 27 percent of the population. [Ministry of Health and Family Welfare (MoHFW) (2017) : 'National Health Policy, 2017', p 9.]

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ Both **A** and **R** are correct and **R** is the correct explanation of **A**
- (B) ☒ **Both A and R are correct but R is NOT the correct explanation of A (Correct Answer)**
- (C) ☐ **A** is correct but **R** is not correct
- (D) ☐ **A** is not correct but **R** is correct

Question No.24 (Question Id - 95)

Match **List-I** with **List-II** :

List - I	List - II
Disorder	Toxin
A. Lathyrism	I. Pyrolizidine
B. Epidemic dropsy	II. Clavine alkaloids
C. Endemic ascites	III. BOAA
D. Ergotism	IV. Sanguinarine

Choose the **correct** answer from the options given below :

- (A) ☐ A - IV, B - III, C - I, D - II
- (B) ☐ A - I, B - II, C - III, D - IV
- (C) ☒ **A - III, B - IV, C - I, D - II (Correct Answer)**
- (D) ☐ A - III, B - IV, C - II, D - I

Question No.25 (Question Id - 73)

Match the following methods of economic analysis applied to health services :

List - I	List - II
A. Cost-benefit analysis	I. Input in monetary terms and outcomes as health benefit indicators
B. Cost-effectiveness analysis	II. Inputs in a programme in financial terms against purpose for which costs are incurred
C. Cost-accounting	III. Input in monetary terms and outcomes also as economic benefits

Choose the **correct** answer from the options given below :

- (A) ☐ A - I, B - II, C - III
- (B) ☒ **A - III, B - I, C - II (Correct Answer)**
- (C) ☐ A - II, B - III, C - I
- (D) ☐ A - II, B - I, C - III

Question No.26 (Question Id - 66)

Given below are one statement of **Assertion** and two **Reasoning** statements.

Assertion :

There is no such thing as absolute 100% proof in science.

Reasoning 1 :

All we have is probability and levels of confidence. People with a claim to be scientists have to quantify the risk of error and state it. This honesty is essential in 'acting scientifically'.

Reasoning 2 :

Scientific research when poorly performed, cannot give us results in which we can have confidence, and so it is difficult to claim that science gives 100% proof.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ The **Assertion** is wrong.
- (B) ☒ **The Assertion is correct, and Reasoning 1 is the basis for it. (Correct Answer)**
- (C) ☐ The **Assertion** is correct, and **Reasoning 2** is the basis for it.
- (D) ☐ The **Assertion** is correct, but **Reasoning 1** and **2** are incorrect.

Question No.27 (Question Id - 8)

Match the pairs :

List - I	List - II
Insecticide	Type
A. Chlorthion	I. Organo-phosphorus compounds
B. DDT	II. Organo-chlorine compounds

C. Dimetilan	III. Carbamates
D. Pyrethrum	IV. Natural poison

Choose the **correct** answer from the options given below :

- (A) ☐ **A - I, B - II, C - III, D - IV (Correct Answer)**
- (B) ☐ A - II, B - I, C - IV, D - III
- (C) ☐ A - II, B - I, C - III, D - IV
- (D) ☐ A - I, B - II, C - IV, D - III

Question No.28 (Question Id - 48)

Match **List - I** with **List - II**

List - I	List - II
Vector	Disease
A. Sandfly	I. Epidemic typhus
B. Ticks	II. Dracunculiasis
C. Cyclops	III. Kala azar
D. Lice	IV. Tularaemia

Choose the **correct** answer from the options given below :

- (A) ☐ A - I; B - III; C - IV; D - II
- (B) ☐ A - IV; B - II; C - III; D - I
- (C) ☐ A - II; B - I; C - IV; D - III
- (D) ☐ **A - III; B - IV; C - II; D - I (Correct Answer)**

Question No.29 (Question Id - 39)

All are true about dietary modification recommended by the WHO Expert Committee for prevention of coronary heart disease EXCEPT :

- (A) ☐ Limit consumption of saturated fats to <10% of total energy intake
- (B) ☐ Reduction of fat intake to 20-30% of total energy intake
- (C) ☐ Reduction of dietary cholesterol to <100 mg/1000 kcal/day
- (D) ☐ **Reduction of salt intake to 3 g daily or less (Correct Answer)**

Question No.30 (Question Id - 9)

Match the pairs of following zoonotic disease :

List - I	List - II
Type of infection	Disease
A. Bacterial infection	I. Brucellosis
B. Viral infection	II. Rabies
C. Protozoan infection	III. Trypanosomiasis
D. Helminthic infection	IV. Schistosomiasis

Choose the **correct** answer from the options given below :

- (A) ☐ A - II, B - I, C - IV, D - III
- (B) ☐ A - I, B - II, C - IV, D - III
- (C) ☐ **A - I, B - II, C - III, D - IV (Correct Answer)**
- (D) ☐ A - II, B - I, C - III, D - IV

Question No.31 (Question Id - 33)

Antiserum accords passive immunization, and was originally prepared from :

- (A) ☐ Guinea pigs
- (B) ☐ **Horses (Correct Answer)**
- (C) ☐ Mice
- (D) ☐ Cats

Question No.32 (Question Id - 76)

Which age group is **not** included in dependency ratio ?

- (A) ☐ 0 - 5 years
- (B) ☐ 6 -14 years
- (C) ☒ **15 - 45 years (Correct Answer)**
- (D) ☐ > 65 years

Question No.33 (Question Id - 40)

Which of the following is a modifiable risk factor for hypertension ?

- (A) ☐ Age
- (B) ☐ Sex
- (C) ☐ Ethnicity
- (D) ☒ **Obesity (Correct Answer)**

Question No.34 (Question Id - 5)

Arrange the following steps of sewage treatment in sequence :

- A. Grit chamber
- B. Primary sedimentation tank
- C. Screen
- D. Biological treatment
- E. Final sedimentation tank

Choose the **correct** answer from the options given below :

- (A) ☐ A - B - C - D - E
- (B) ☒ **C - A - B - D - E (Correct Answer)**
- (C) ☐ B - A - C - D - E
- (D) ☐ C - B - A - D - E

Question No.35 (Question Id - 72)

Which of the following health interventions are commonly included under Health Promotion ?

- A. Immunisation
- B. Health education
- C. Provision of treatment facilities
- D. Environmental modifications
- E. Lifestyle and behavioural changes

Choose the **correct** answer from the options given below :

- (A) ☐ A, B, C
- (B) ☐ A, C, E
- (C) ☒ **B, D, E (Correct Answer)**
- (D) ☐ B, C, E

Question No.36 (Question Id - 91)

Bhore Committee report states :

“While recognizing that it is not within the scope of our enquiry to suggest ways and means by which poverty and unemployment should be eliminated, we feel that our survey of the causes of ill-health in India will not be complete without drawing attention the profound influence that these factors exert on the health of the community. In a reaffirmation of the principles regarding the health policy in connection with discussions on the Beveridge Report, the British Medical Association emphasized that 'the health of the people under which they live and work, upon security against fear and want, upon nutritional standards, upon educational facilities, and upon the facilities for exercise and leisure.’”

- A. That because it was not within the scope of enquiry, the committee was restrained in its deliberation on ways and means to eliminate socio-economic factors, even though these are important causes of ill-health.

B. Making policy regarding the living and working conditions, are beyond the scope of health policy.

C. The Committee acknowledges the important bearing that socio-economic factors have on health of people and cites examples to prove its contention.

Choose the **most appropriate** answer from the options given below :

- (A) ☐ Only A is true
- (B) ☐ Only B is true
- (C) ☐ Both A and B are true
- (D) ☒ **Only C is true (Correct Answer)**

Question No.37 (Question Id - 26)

Reservoir of enteric fever :

- (A) ☐ Cattle
- (B) ☒ **Humans (Correct Answer)**
- (C) ☐ Bats
- (D) ☐ Birds

Question No.38 (Question Id - 30)

All are true of measles EXCEPT :

- (A) ☒ **Both active and passive immunization given simultaneously for prevention (Correct Answer)**
- (B) ☐ May lead to flaring up of TB
- (C) ☐ Most infectious during rashes
- (D) ☐ Complications include otitis media and pneumonia

Question No.39 (Question Id - 78)

Who among the following is considered father of modern epidemiology ?

- (A) ☒ **John Snow (Correct Answer)**
- (B) ☐ Alexander Fleming
- (C) ☐ Hippocrates
- (D) ☐ Louis Pasteur

Question No.40 (Question Id - 13)

The minimum recommended dose of "free" residual chlorine in water for routine chlorination (in mg/lts) is :

- (A) ☐ 0.5 mg/l for a contact period of 1/2 hr
- (B) ☒ **0.5 mg/l for a contact period of 1 hr (Correct Answer)**
- (C) ☐ 1.0 mg/l for a contact period of 1 hr
- (D) ☐ 1.0 mg/l for a contact period of 1/2 hr

Question No.41 (Question Id - 38)

Which of the following is NOT an effective antibiotic for prophylaxis of contacts of meningococcal meningitis ?

- (A) ☐ Rifampicin
- (B) ☒ **Co-trimoxazole (Correct Answer)**
- (C) ☐ Ciprofloxacin
- (D) ☐ Azithromycin

Question No.42 (Question Id - 25)

In a patient admitted to a government hospital of Delhi with fever, blood smear is positive for P falciparum. Since the patient is clinically an uncomplicated case, which of the following treatment regimens is indicated as per the revised Diagnosis and Treatment of malaria 2013 guidelines ?

- (A) ☐ Artesunate 50 mg for 3 days + sulfadoxine - pyremethamine (500 & 25 mg) single dose + Primaquine for 14 days.
- (B) ☐ Artesunate alone 4 mg/kg if the patient were pregnant and in second trimester.
- (C) ☒ **Artesunate 4 mg/kg daily 3 days + sulfadoxine - pyremethamine (25 & 1.25 mg/kg) one dose + Primaquine 0.75 mg/kg single dose on day 2. (Correct Answer)**

(D) ☐ Artesunate 200 mg + sulfadoxine - pyremethamine (750 & 37.5 mg) daily for 3 days.

Question No.43 (Question Id - 37)

The below question has been dropped and full marks are awarded.

Which of the following is NOT transmitted by hard ticks ?

- (A) ☐ KFD
(B) ☐ Human babesiosis
(C) ☐ Tick paralysis
(D) ☐ Tick typhus

Question No.44 (Question Id - 46)

Arrange the following causes of blindness in India in descending order of prevalence :

- A. Posterior segment pathology
B. Glaucoma
C. Refractive error
D. Posterior capsular opification
E. Cataract

Choose the **correct** answer from the options given below :

- (A) ☐ A - B - D - E - C
(B) ☐ **E - C - B - A - D (Correct Answer)**
(C) ☐ C - D - B - A - E
(D) ☐ E - C - B - D - A

Question No.45 (Question Id - 51)

The case fatality rate of COVID-19 infection in China is :

- (A) ☐ Higher than of SARS infection
(B) ☐ Double that of SARS infection
(C) ☐ Same as that of SARS infection
(D) ☐ **Less than that of SARS infection (Correct Answer)**

Question No.46 (Question Id - 35)

Influenza cases reported from all over the world is an example of :

- (A) ☐ Exotic disease
(B) ☐ Epidemic disease
(C) ☐ Endemic disease
(D) ☐ **Pandemic disease (Correct Answer)**

Question No.47 (Question Id - 83)

An organized group of people with social relationship is known as :

- (A) ☐ Community
(B) ☐ Association
(C) ☐ **Society (Correct Answer)**
(D) ☐ Family

Question No.48 (Question Id - 6)

Match the pairs :

List - I	List - II
Vaccine	Type
A. Rubella	I. Polysaccharides
B. IPV(polio)	II. Toxoid/protein
C. Anthrax	III. Killed organism
D. Hib	IV. Live attenuated

Choose the **correct** answer from the options given below :

- (A) ☐ **A - IV, B - III, C - II, D - I (Correct Answer)**

- (B) ☐ A - III, B - IV, C - II, D - I
(C) ☐ A - III, B - IV, C - I, D - II
(D) ☐ A - IV, B - III, C - I, D - II

Question No.49 (Question Id - 84)

Inner subjective thought of a person towards an individual or a situation is best described as :

- (A) ☐ Attitude
(B) ☐ Value
(C) ☐ **Belief (Correct Answer)**
(D) ☐ Opinion

Question No.50 (Question Id - 94)

Given below are two statements : one is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion A :

“Primary health care is essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford.”

Reason R :

Primary health care is termed as universally accessible 'essential health care' because it includes, among other things, promotion of food supply and nutrition; adequate supply of safe water and basic sanitation; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provisioning of essential drugs.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ **Both A and R are correct and R is the correct explanation of A (Correct Answer)**
(B) ☐ Both **A** and **R** are correct but R is NOT the correct explanation of **A**
(C) ☐ **A** is correct but **R** is not correct
(D) ☐ **A** is not correct but **R** is correct

Question No.51 (Question Id - 71)

Given below are two statements :

Statement I:

Predictive value of a screening test depends upon its sensitivity, cost and time for results.

Statement II:

Predictive value of a screening test depends on its sensitivity, specificity and disease prevalence.

In light of the above statements, choose the **correct** answer from the options given below :

- (A) ☐ **Statement I** is correct and **Statement II** is wrong
(B) ☐ **Statement I is wrong and Statement II is correct (Correct Answer)**
(C) ☐ Both **Statement I** and **Statement II** are correct
(D) ☐ Both **Statement I** and **Statement II** are wrong

Question No.52 (Question Id - 2)

Match the pairs :

List - I	List - II
Disease	Parasite
A. Sleeping sickness	I. Trypanosomes
B. Hydatid disease	II. Echinococcus

C. Guinea worm	III. <i>Dracunculosis medinensis</i>
D. Filariasis	IV. <i>Wuchereria bancrofti</i>

Choose the **correct** answer from the options given below :

- (A) ☐ **A - I, B - II, C - III, D - IV (Correct Answer)**
- (B) ☐ A - I, B - III, C - II, D - IV
- (C) ☐ A - IV, B - III, C - I, D - II
- (D) ☐ A - II, B - III, C - I, D - IV

Question No.53 (Question Id - 16)

Whispering produces a sound of :

- (A) ☐ **20 - 30 dB (Correct Answer)**
- (B) ☐ 30 - 40 dB
- (C) ☐ 40 - 50 dB
- (D) ☐ 50 - 60 dB

Question No.54 (Question Id - 20)

Which of the following is **not** reported in India ?

- (A) ☐ Plasmodium vivax
- (B) ☐ Plasmodium falciparum
- (C) ☐ **Plasmodium ovale (Correct Answer)**
- (D) ☐ Plasmodium malariae

Question No.55 (Question Id - 21)

Paucibacillary leprosy cases are examined clinically at least once a year after completion of therapy for a duration of :

- (A) ☐ 1 year
- (B) ☐ **2 years (Correct Answer)**
- (C) ☐ 3 years
- (D) ☐ 5 years

Question No.56 (Question Id - 70)

Given below are two statements :

Statement I:

Screening is based on the concept of the 'iceberg' phenomenon of disease and early diagnosis and treatment.

Statement II:

However, the value of mass screening programmes has been questioned and it is considered that ideally an RCT should be conducted to evaluate the worth of the programme before initiating it.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ **Statement I** is correct and **Statement II** is wrong
- (B) ☐ **Statement I** is wrong and **Statement II** is correct
- (C) ☐ Both **Statement I** and **Statement II** are wrong
- (D) ☐ **Both Statement I and Statement II are correct (Correct Answer)**

Question No.57 (Question Id - 65)

Review of published research essentially requires the reviewer to :

- (A) ☐ **Assess whether the methodology is appropriate for the stated objectives and the findings are logically analysed.**
- (Correct Answer)**
- (B) ☐ Assess whether the research provides an encouraging picture of the official programme and its implementation.
- (C) ☐ Assess whether the study is based on global health guidelines as the gold

standard.

(D) ☐ Assess whether the study was too costly.

Question No.58 (Question Id - 14)
When the level of hardness in water is around 150 - 300 mg/litre it is classified as :
(A) ☐ Soft water
(B) ☐ Moderately hard water
(C) ☐ **Hard water (Correct Answer)**
(D) ☐ Very hard water

Question No.59 (Question Id - 81)
Human living standards can be compared across the countries by :
(A) ☐ **HDI (Correct Answer)**
(B) ☐ PQLI
(C) ☐ HPI
(D) ☐ DALY

Question No.60 (Question Id - 60)
Sentinel surveillance is undertaken to estimate :
(A) ☐ **Trends in prevalence of a disease in a population (Correct Answer)**
(B) ☐ Incidence rate of disease in a population
(C) ☐ Diagnose new cases of a disease
(D) ☐ None of the above

Question No.61 (Question Id - 44)
Given below are two statements : **Assertion A** and **Reason R**.
Assertion A :
World wide lung cancer remains the leading cause of cancer incidence and mortality.
Reason R :
Lung cancer has been known in industrial workers from the late 19th century.
In the light of the above statements, choose the **most appropriate** answer from the options given below :
(A) ☐ Both **A** and **R** are correct and **R** is the correct explanation of **A**.
(B) ☐ **Both A and R are correct but R is NOT the correct explanation of A. (Correct Answer)**
(C) ☐ **A** is correct but **R** is not correct.
(D) ☐ **A** is not correct but **R** is correct.

Question No.62 (Question Id - 19)
In Acute Flaccid Paralysis, examination for residual paralysis should be done after :
(A) ☐ 30 days
(B) ☐ **60 days (Correct Answer)**
(C) ☐ 90 days
(D) ☐ 120 days

Question No.63 (Question Id - 74)
Adverse Effect Following Immunisation (AEFI) is any untoward medical occurrence following immunization which may or may not have a causal relationship with the usage of the vaccine.
Match the following type of AEFI as in **List-I** with the cause, as in **List-II**.

List - I	List - II
A. Vaccine product related reaction	I. AEFI caused by something other than the vaccine product, error or immunization anxiety.
B. Vaccine quality-defect related reaction	II. AEFI caused by inappropriate vaccine handling, prescribing or administration.
C. Immunisation error related reaction	III. AEFI caused by a vaccine that is due to quality defect(s) of the product (vaccine or administration device)

	as provided by the manufacturer.
D. Coincidental event	IV. AEFI caused or precipitated by a vaccine due to one or more of its inherent properties.

Choose the **most appropriate** answer from the options given below :

- (A) ☐ A - III, B - II, C - IV, D - I
- (B) ☐ A - IV, B - I, C - III, D - II
- (C) ☐ A - II, B - IV, C - III, D - I
- (D) ☐ **A - IV, B - III, C - II, D - I (Correct Answer)**

Question No.64 (Question Id - 75)

Match **List-I** with **List-II** :

List - I	List - II
A. Investigator bias	I. Non-representative sample due to chance
B. Sampling bias	II. Erroneous sampling method
C. Measurement bias	III. Subjectivity of the investigator
D. Chance error	IV. Validity of tool

Choose the **most appropriate** answer from the options given below :

- (A) ☐ A - II, B - I, C - III, D - IV
- (B) ☐ **A - III, B - II, C - IV, D - I (Correct Answer)**
- (C) ☐ A - I, B - II, C - III, D - IV
- (D) ☐ A - II, B - I, C - IV, D - III

Question No.65 (Question Id - 100)

Match **List-I** with **List-II** :

List - I	List - II
WHO Region	Headquarter
A. Western Pacific	I. Copenhagen (Denmark)
B. Africa	II. Brazzaville (Congo)
C. Eastern Mediterranean	III. Manila (Philippines)
D. Europe	IV. Alexandria (Egypt)

Choose the **correct** answer from the options given below :

- (A) ☐ A - II, B - III, C - I, D - IV
- (B) ☐ A - III, B - II, C - I, D - IV
- (C) ☐ A - II, B - IV, C - III, D - I
- (D) ☐ **A - III, B - II, C - IV, D - I (Correct Answer)**

Question No.66 (Question Id - 80)

Folic acid deficiency in the body produces :

- (A) ☐ Carcinoma stomach
- (B) ☐ Spinal degeneration
- (C) ☐ Changes in central nervous system
- (D) ☐ **Megaloblastic anaemia (Correct Answer)**

Question No.67 (Question Id - 86)

Which one of the following were **not** a part of Bhore Committee recommendations ?

- (A) ☐ Pyramid shaped structure of different levels of public health services
- (B) ☐ **Incorporating indigenous systems of medicine in provisioning of medical relief (Correct Answer)**
- (C) ☐ Forced marches for developing industries and agriculture
- (D) ☐ Recommendations regarding control of tuberculosis and malaria

Question No.68 (Question Id - 57)

Passive immunity refers to :

- (A) ☐ Antibodies produced in response to a foreign agent
- (B) ☐ Cellular immunity produced in response to a foreign agent

<div>(C) <input type="radio"/> Antibodies transferred from mother through the placenta (Correct Answer)</div> <div>(D) <input type="radio"/> None of the above</div>
<div>Question No.69 (Question Id - 85)</div> <div>The socio-economic/housing scale developed for only rural setup is :</div> <div>(A) <input type="radio"/> Pareek (Correct Answer)</div> <div>(B) <input type="radio"/> Kuppuswamy</div> <div>(C) <input type="radio"/> Bhore</div> <div>(D) <input type="radio"/> Adson's scale</div>
<div>Question No.70 (Question Id - 53)</div> <div>Incidence rate of an acute disease includes :</div> <div>(A) <input type="radio"/> All new cases (Correct Answer)</div> <div>(B) <input type="radio"/> All old and new cases</div> <div>(C) <input type="radio"/> All persisting cases</div> <div>(D) <input type="radio"/> Only severe cases</div>
<div>Question No.71 (Question Id - 12)</div> <div>Horrock's apparatus estimates :</div> <div>(A) <input type="radio"/> Chlorine demand (Correct Answer)</div> <div>(B) <input type="radio"/> Free chlorine</div> <div>(C) <input type="radio"/> Combined chlorine</div> <div>(D) <input type="radio"/> 2 and 3</div>
<div>Question No.72 (Question Id - 7)</div> <div>Arrange the following vaccines according to their sensitivity to heat, most sensitive to least sensitive :</div> <div>A. Measles</div> <div>B. Human papillomavirus</div> <div>C. Hepatitis B</div> <div>D. OPV</div> <div>Choose the correct answer from the options given below :</div> <div>(A) <input type="radio"/> D - C - B - A</div> <div>(B) <input type="radio"/> D - A - B - C (Correct Answer)</div> <div>(C) <input type="radio"/> A - B - C - D</div> <div>(D) <input type="radio"/> B - C - A - D</div>
<div>Question No.73 (Question Id - 77)</div> <div>The reason for late expanding stage of population in India is :</div> <div>(A) <input type="radio"/> Birth rate is stationary even as death rate continues to fall</div> <div>(B) <input type="radio"/> Death rate is declining faster than birth rate (Correct Answer)</div> <div>(C) <input type="radio"/> Birth rate is declining, while death rate is the same</div> <div>(D) <input type="radio"/> Birth rate is lesser than the death rate</div>
<div>Question No.74 (Question Id - 61)</div> <div>The pulse rate of 6 persons was found to be : 60, 62, 65, 61, 66, 67. Give the correct answer among the following :</div> <div>(A) <input type="radio"/> The mean of the group is higher than the median</div> <div>(B) <input type="radio"/> The mean of the group is lower than the median</div> <div>(C) <input type="radio"/> The mean of the group is same as the median (Correct Answer)</div> <div>(D) <input type="radio"/> None of the above</div>
<div>Question No.75 (Question Id - 24)</div> <div>According to Suraksha Clinic in National AIDS Control Program, for a patient coming with inguinal bubo, the color code of treatment kit is :</div> <div>(A) <input type="radio"/> Black (Correct Answer)</div> <div>(B) <input type="radio"/> Yellow</div>

- (C) ☐ Green
- (D) ☐ Grey

Question No.76 (Question Id - 47)

Measures for prevention of hospital-acquired infections :

- A. Surgical asepsis for insertion of vascular devices
- B. Optimal antibiotic prophylaxis
- C. Influenza vaccination for staff
- D. Preoperative shower and local skin preparation of patient
- E. Surgical wound surveillance

Choose the **correct** answer from the options given below :

- (A) ☐ B, D, E only
- (B) ☐ A, C, D only
- (C) ☐ B, C, D, E only
- (D) ☐ **A, B, C, D, E only (Correct Answer)**

Question No.77 (Question Id - 87)

Which of the following committees recommended that 'intelligent young men and women in the rural areas who are able to read and write in their mother tongue should be trained as front line health workers' and 'that 1/3rd of them be trained to become full doctors :

- (A) ☐ Bhore Committee
- (B) ☐ Mudaliar Committee
- (C) ☐ **S S Sokhey Committee (Correct Answer)**
- (D) ☐ Srivastava Committee report

Question No.78 (Question Id - 42)

Given below are two statements : **Assertion A** and **Reason R**.

Assertion A :

AIDS is transmitted by contaminated blood-transfusion of whole blood cells, platelets and factors VIII and IX derived from human plasma.

Reason R :

HIV may pass from an infected mother to her foetus.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☐ Both **A** and **R** are correct and **R** is the correct explanation of **A**.
- (B) ☐ **Both A and R are correct but R is NOT the correct explanation of A. (Correct Answer)**
- (C) ☐ **A** is correct but **R** is not correct.
- (D) ☐ **A** is not correct but **R** is correct.

Question No.79 (Question Id - 92)

“..... the overall growth of the world population and the rates of growth in population increased as the means of production in the society advanced. Improved means of production resulted in new relations of production, much greater production, and more efficient distribution of produce, thereby enabling the transition of human civilization to a higher stage of development. The different phases of development in the means of production also determined the ability of the society to fight disease, natural disasters, and other causes of death, as developments in science and technology accompanied the development of the means of production. Thus, every distinct phase in human civilization was characterized by its distinctive balance between death and birth rates and a growth rate of population determined by the means to sustain the population”.

A. The distribution of resources produced by the society is immaterial to the growth of the population.

- B. With the development of human civilization, the massive increase in human population has led to scarcity of resources for its sustenance.
- C. The rate of growth of the population and its well-being depend on the productive resources available in the society, improvements in the productive capacity and the distribution of the resources.
- D. The claims of excessive population or under-population are relative to the social and economic progress made by the society.

Choose the **most appropriate** answer from the options given below :

- (A) ☐ Only A is true
- (B) ☐ Only B is true
- (C) ☒ **Only C and D are true (Correct Answer)**
- (D) ☐ Only A and B are true

Question No.80 (Question Id - 3)

Match the pairs of Triage category :

List - I	List - II
Colour code	Disease conditions
A. Red	I. Dead
B. Black	II. Minor injuries
C. Green	III. Immediate intervention needed
D. Yellow	IV. Life-saving surgery in next 24 hours

Choose the **correct** answer from the options given below :

- (A) ☐ A - IV, B - III, C - II, D - I
- (B) ☒ **A - III, B - I, C - II, D - IV (Correct Answer)**
- (C) ☐ A - I, B - II, C - IV, D - III
- (D) ☐ A - III, B - IV, C - II, D - I

Question No.81 (Question Id - 67)

Place the following in sequence of a planning cycle :

- A. Assessment of resources
- B. Analysis of the health situation
- C. Formulating plans
- D. Monitoring
- E. Programming and implementation

Choose the **correct** answer from the options given below :

- (A) ☒ **B, A, C, E, D (Correct Answer)**
- (B) ☐ A, B, C, D, E
- (C) ☐ D, B, A, C, E
- (D) ☐ C, E, D, A, B

Question No.82 (Question Id - 18)

In the year 2013, Category II treatment for tuberculosis consisted of :

- (A) ☐ 2HRZES+5HRZ
- (B) ☐ 2HRZE+4HRZ+3HR
- (C) ☒ **2HRZES+1HRZE+5HRE (Correct Answer)**
- (D) ☐ 2HRZE+4HR

Question No.83 (Question Id - 50)

Given below are two statements :

Statement I:

Cigarette smoking has a causal relationship with lung cancer.

Statement II:

Other factors implicated in the aetiology of lung cancer include polycyclic aromatic hydrocarbons and certain nickel-bearing dusts.

In light of the above statements, choose the **most appropriate** answer from the options given below :

- (A) ☒ Both Statement I and Statement II are correct (Correct Answer)
- (B) ☐ Both Statement I and Statement II are incorrect
- (C) ☐ Statement I is correct but Statement II is incorrect
- (D) ☐ Statement I is incorrect but Statement II is correct

Question No.84 (Question Id - 88)

An active advocacy of making India a destination for 'Clinical Trials Industry' has been done in which of the following policy documents ?

- (A) ☒ National Commission for Macroeconomics in Health (Correct Answer)
- (B) ☐ National Health Policy, 1983
- (C) ☐ National Rural Health Mission document
- (D) ☐ High Level Expert Group (HLEG) set-up by the Planning Commission

Question No.85 (Question Id - 1)

Match the pairs :

List - I	List - II
Disease	Cause
A. Anthracosis	I. Coal dust
B. Byssinosis	II. Mollasses
C. Bagassosis	III. Cotton fibres
D. Farmers lung	IV. Mouldy hay

Select the **most appropriate** option from the given below :

- (A) ☒ A - I, B - III, C - II, D - IV (Correct Answer)
- (B) ☐ A - I, B - II, C - IV, D - III
- (C) ☐ A - I, B - IV, C - II, D - III
- (D) ☐ A - I, B - II, C - III, D - IV

Question No.86 (Question Id - 56)

A cohort study :

- (A) ☐ Starts with diseased persons
- (B) ☐ Starts with only exposed persons
- (C) ☐ Does not include persons without the disease
- (D) ☒ Starts with persons without the disease (Correct Answer)

Question No.87 (Question Id - 59)

In health planning, considerations of health resources generally **do not** include :

- (A) ☐ Money and materials
- (B) ☒ Patients and their relatives (Correct Answer)
- (C) ☐ Knowledge and techniques
- (D) ☐ Time and support for action

Question No.88 (Question Id - 15)

Kata thermometer measures :

- (A) ☐ Air temperature only
- (B) ☐ Air humidity only
- (C) ☒ Air temperature and air movement (Correct Answer)
- (D) ☐ None of the above

Question No.89 (Question Id - 89)

Which of the following periods in history have witnessed the fastest growth rate of human population ?

- (A) ☒ Period of maximum industrial and technological advancement from 1950

to 2000. (Correct Answer)

- (B) ☐ The initial period of industrial revolution from 1750 to 1950.
- (C) ☐ Development of predominantly rural agrarian societies from 0 - 1750 AD.
- (D) ☐ Pre-agricultural era : hunters and gatherers from 35,000 to 10,000 BC.

Question No.90 (Question Id - 4)

Match the Pairs :

List - I	List - II
Pathogen	Disease/Syndrome
A. <i>Treponema Pallidum</i>	I. Chancroid
B. <i>Haemophilus ducreyi</i>	II. Donovanosis
C. <i>Calymmatobacterium granulomatis</i>	III. Syphilis
D. Human Papillomavirus	IV. Genital warts

Choose the **correct** answer from the options given below :

- (A) ☐ A - I, B - II, C - III, D - IV
- (B) ☐ A - III, B - II, C - I, D - IV
- (C) ☐ A - IV, B - I, C - II, D - III
- (D) ☐ **A - III, B - I, C - II, D - IV (Correct Answer)**

Question No.91 (Question Id - 96)

Match **List-I** with **List-II** :

List - I	List - II
Nutrition Program	Ministry
A. Mid-day meal program	I. Ministry of health and family welfare
B. Balwadi nutrition program	II. Ministry of social welfare
C. ICDS program	III. Ministry of women and child development
D. Iodine deficiency disorders control program	IV. Ministry of human resource development

Choose the **correct** answer from the options given below :

- (A) ☐ **A - IV, B - II, C - III, D - I (Correct Answer)**
- (B) ☐ A - IV, B - III, C - II, D - I
- (C) ☐ A - III, B - II, C - IV, D - I
- (D) ☐ A - II, B - IV, C - III, D - I

Question No.92 (Question Id - 31)

Chickenpox is a highly communicable disease; the secondary attack rate in household contacts approaches :

- (A) ☐ 70%
- (B) ☐ 75%
- (C) ☐ 80%
- (D) ☐ **90% (Correct Answer)**

Question No.93 (Question Id - 11)

All the following provide evidence of faecal pollution except :

- (A) ☐ Faecal streptococci
- (B) ☐ Coliforms
- (C) ☐ Cl. Perfringens
- (D) ☐ **Cl. Tetani (Correct Answer)**

Question No.94 (Question Id - 64)

The 'paradox of sampling' is that the sample can be misleading if it is not representative of the population, and how can we tell if it is representative or not without testing the whole population ? Biostatistics answers this question by :

- (A) ☐ Choice of appropriate sampling methodology
- (B) ☐ By exercising caution in interpretation of findings and avoiding over-

<div>generalisation</div> <div>(C) <input type="radio"/> Both the above (Correct Answer)</div> <div>(D) <input type="radio"/> None of the above</div>
<div>Question No.95 (Question Id - 58)</div> <div>The median height of children in a class was 4 ft. this means that :</div> <div>(A) <input type="radio"/> Half the children were of 4 ft.</div> <div>(B) <input type="radio"/> Half the children were less than 4 ft.</div> <div>(C) <input type="radio"/> The maximum number of children was clustered at 4 ft.</div> <div>(D) <input type="radio"/> Half were more than 4 ft. and half were less than 4 ft. (Correct Answer)</div>
<div>Question No.96 (Question Id - 55)</div> <div>Cyclical trends in disease occurrence relates to :</div> <div>(A) <input type="radio"/> Long term secular changes in a population</div> <div>(B) <input type="radio"/> Herd immunity in a population (Correct Answer)</div> <div>(C) <input type="radio"/> Seasonal variations across different populations</div> <div>(D) <input type="radio"/> Seasonal variations in a given year</div>
<div>Question No.97 (Question Id - 52)</div> <div>Epidemiology is the study of :</div> <div>(A) <input type="radio"/> Epidemics</div> <div>(B) <input type="radio"/> Magnitude and pattern of diseases</div> <div>(C) <input type="radio"/> Health services utilization</div> <div>(D) <input type="radio"/> All the above (Correct Answer)</div>
<div>Question No.98 (Question Id - 62)</div> <div>Median is a preferred measure of central tendency when :</div> <div>(A) <input type="radio"/> There are outliers in the population (Correct Answer)</div> <div>(B) <input type="radio"/> There is a wide range</div> <div>(C) <input type="radio"/> There is high variability</div> <div>(D) <input type="radio"/> There is a small sample</div>
<div>Question No.99 (Question Id - 82)</div> <div>Zinc deficiency leads to all except :</div> <div>(A) <input type="radio"/> Delayed sexual maturation</div> <div>(B) <input type="radio"/> Impaired immune function</div> <div>(C) <input type="radio"/> Skeletal abnormalities</div> <div>(D) <input type="radio"/> Excessive appetite (Correct Answer)</div>
<div>Question No.100 (Question Id - 63)</div> <div>The 10th percentile will have :</div> <div>(A) <input type="radio"/> 90% population below it</div> <div>(B) <input type="radio"/> 90% population above it (Correct Answer)</div> <div>(C) <input type="radio"/> 45% population above it</div> <div>(D) <input type="radio"/> 45% population below it</div>