

लोक सेवा आयोग

नेपाल स्वास्थ्य सेवा, हेल्थ इन्स्पेक्सन समुह,
साहायक पाचौ तह, हेल्थ असिष्टेन्ट वा सो सरह पदको पतियोगितात्मक लिखित नमुना परिक्षा

Set (A)

मिति: २०८१/१२/१६

समय: ४५ मिनेट

बिषय:- हेल्थ इन्स्पेक्सन सम्बन्धी

पूर्णाङ्क:- १००

उत्तरपुस्तिकामा प्रश्नपत्रको Key अनिवार्य उल्लेख गर्नुपर्नेछ । उल्लेख नगरेमा उत्तरपुस्तिका रद्द हुनेछ। साथै परीक्षामा Calculator, Mobile प्रयोग गर्न पाइने छैन।

बस्तुगत बहुउत्तर प्रश्न(५०×२अङ्क):-

- A 'slapped cheek' rash is characteristically seen in which of the following infections?**
 - Measles
 - Rubella
 - Chickenpox
 - Erythema infectiosum
- Which of the following pharmacological agents can be used for the treatment of visceral Leishmaniasis?**
 - Pentavalent antimonials
 - Amphotericin B
 - Spiramycin
 - Paromomycin

Select the correct answer using the code given below:

 - 1, 2 and 3
 - 1, 2 and 4
 - 1, 3 and 4
 - 2, 3 and 4
- Which of the following are correct with regard to BCG vaccination?**
 - It is a live-attenuated vaccine.
 - It is administered by intramuscular injection.
 - It is derived from Mycobacterium bovis.
 - It is highly immunogenic.

Select the answer using the code given below:

 - 1, 2 and 3
 - 2, 3 and 4
 - 1, 3 and 4
 - 1, 2 and 4
- Which of the following statements are correct in respect of scabies?**
 - Male mite *Sarcoptes scabiei* are commonly transferred from an infected person to a non-infected person.
 - Norwegian scabies occur in immunodeficient patients.
 - Permethrin cream (5%) is used for treatment.
 - Pruritus intensifies at night and after hot shower.

Select the answer using the code given below:

 - 1, 2 and 3
 - 1, 2 and 4
 - 1, 3 and 4
 - 2, 3 and 4
- Which one of the following fine motor milestones will appear ahead of others?**
 - Copies a cross
 - Copies a circle
 - Draws a circle
 - Draws a cross
- Which of the following statements are correct regarding the fluid management of pediatric inpatients with burn injuries?**
 - The Parkland formula estimates the amount of fluid to be replaced over 24 hours.
 - Volume of fluid (mL) = 4 mL × Weight (kg) × Total body surface area burn(%).
 - Additional maintenance fluid therapy is also to be given to the child.

4. Half of the resuscitation volume should be given over 6 hours and the remaining half over the next 18 hours.

Select the answer using the code given below:

- (a) 1, 2 and 4 (b) 1, 2 and 3
(c) 1, 3 and 4 (d) 2, 3 and 4

7. Which of the following are signs of good attachment during breastfeeding?

1. The baby's nose is at the level of the nipple.
2. The baby's mouth is wide open.
3. The baby's chin touches the breast.
4. The baby's lower lip is everted.

Select the correct answer using the code given below:

- (a) 1, 2 and 3 (b) 2, 3 and 4
(c) 1, 3 and 4 (d) 1, 2 and 4

8. To prevent recurrence, expectant mothers with a previous fetus with neural tube defect should receive folic acid daily at the dose of:

- (a) 4 µg (b) 400 µg
(c) 4 mg (d) 400 mg

9. Which of the following are major complications of oral pills?

1. Cholestasis jaundice
2. Chloasma and acne
3. Venous thromboembolism
4. Breast cancer

Select the correct answer using the code given below:

- (a) 1, 2 and 3 (b) 1, 2 and 4
(c) 1, 3 and 4 (d) 2, 3 and 4

10. Which of the following are unsaturated fatty acids?

1. Lauric acid
2. Linoleic acid
3. Oleic acid
4. Palmitic acid

Select the correct answer using the code given below:

- (a) 1 and 2 (b) 1 and 4
(c) 2 and 3 (d) 3 and 4

11. Which of the following factor inhibit iron absorption from intestine?

- a. Phytate b. Phosphate
c. Both (a) and (b) d. Ascorbic acid

12. Monkey fever is

- a. Leptospirosis b. Brucella
c. KFD (Kyasanur Forest Disease) d. Dengue

13. Brain wash in health education is:

- a. Counseling b. Perception
c. Propaganda d. Motivation

14. Scrub typhus is transmitted by:

- a. Adult mite b. Adult Chigger mite
c. Larval chigger mite d. Egg of chigger mite

15. Eye drop is commonly given in which site of eye ?

- a. Inner canthus b. Lower fornix
c. Cornea d. Outer canthus

16. Which of the following bacteria produced spore ?

- A. streptococcus pneumonia B. Clostridium tetani
C. Pneumococci D. Haemophilus

17. Classical Dengue fever is transmitted by:

- a. Culex Mosquito b. Aedes Mosquito
c. Anopheles Mosquito d. Mansonoides mosquito

(D) Obturator sign positive in retrocecal appendix.

34. Infant with blood in stool and mass in abdomen diagnosis is:

- (A) Intussusception (B) Volvulus
(C) Idiopathic abdominal epilepsy (D) Hirschsprung's disease

35. Fight or flight is response of body to a danger. What system is responsible for this response?

- (A) Somatic nervous system (B) Sympathetic nervous system
(C) Parasympathetic nervous system (D) None of the above

36. Talkativeness and flight of ideas are suggestive of-----

- (A) Hysteria (B) Mania
(C) Depression (D) Schizophrenia

37. An otherwise healthy male presents with a creamy curd like white patch on the tongue. Which one of this following is the most likely diagnosis?

- (A) Aspergillosis (B) Candidiasis
(C) Histoplasmosis (D) Lichen planus

38. The commonest cause of infection of skin is due to :

- (A) Streptococci (B) Staphylococci
(C) Pneumococci (D) Diplococci

39. All of the following organs may be involved in leprosy, except:

- (A) Ovary (B) Testis
(C) Eye (D) Uterus

40. What is the commonest symptom of pelvic organ prolapse?

- (A) Something coming from vagina (B) Urgency of urine
(C) Urinary incontinence (D) Vaginal discharge

41. Usually, delay in return of fertility has seen after the use of:

- (A) Intrauterine contraceptive device (B) Depot medroxy progesterone
(C) Emergency pills (D) Oral contraceptive

42. What is the recommended age of vaccination against HPV?

- (A) First year of life (B) 9-13 years of life
(C) 9 months (D) 1-5 years

43. Commonest cause of torsion of testis is:

- (A) Inversion of the testis (B) High investigation of tunica vaginalis
(C) Tumor of testis (D) Maldescended testis

44. The first step in the management of eclampsia is:

- (A) Termination of pregnancy (D) Transfusion of blood
(C) Rehydration with IV fluids (D) Magnesium sulphate injection

45. Based on the epidemiological studies which of the following has been found to be most protective against carcinoma of colon?

- (A) High fiber diet (B) Low fat diet
(C) Low selenium diet (D) Low protein diet

46. The process of observing subordinates working correct in accordance with policies and defined under:

- (A) Supervision (B) Communication
(C) Leadership (D) Evaluation

47. Which of the following statements is not true regarding malaria?

- (A) Newborn infants are resistance to P. falciparum
(B) ABER is an index of operational efficiency.
(C) Infant parasite rate is used for measuring endemicity of malaria in community.
(D) API is the sophisticated measure of malaria incidence

48. Which of the following statement is not true regarding Tuberculosis (TB)?

- (A) Early administration of BCG vaccine provides high level protection against Pulmonary tuberculosis
(B) TB is not transmitted by fomites
(C) The very useful diagnosis for tuberculosis is sputum examination.

D) Ethambutol is bacteriostatic

49. The biological oxygen demand indicates:

- (A) Chemicals (B) Bacterial content
(C) Anaerobic bacteria (D) Organic matter

50. Which of the following statement is not true?

- (A) Nepal Health service Act was has been amended for four times till date
(B) Nepal health service regulation 2055 was endorsed in 2055/09/19
(C) Nine districts are considered remote districts in Nepal.
(D) The percentage of allocation in reserved seat for Madhesi is 27%

51. प्रदेशसभा सम्बन्धी कुन भनाइ सही छ?

- a. प्रदेशसभा दुई सदनमात्र हुन्छ।
b. नेपालको संविधानको भाग १५ मा प्रदेश व्यवस्थापिका रहेको छ।
c. प्रदेशसभामा प्रत्यक्ष निर्वाचित र समानुपातिक सदस्यहरू रहन्छन्।
d. प्रदेशसभा जुनसुकै व्यक्ति पनि उमेदवार हुनसक्छ।

52. थप गरिएको मौलिक हक तलको कुन हो?

- a. सम्मानपूर्वक वाचन पाउने हक
b. स्वतन्त्रताको हक
c. समानताको हक
d. न्यायको हक

53. कोशी प्रदेश निजामति सेवामा नरहने सेवा तलको कुन हो?

- a. प्रदेश स्वास्थ्य सेवा
b. प्रदेश कानून सेवा
c. प्रदेश प्रशासन सेवा
d. प्रदेश सुचना प्रविधि सेवा

54. सचित गर्न नपाईने विदा तलको कुन हो?

- a. भैपरी आउने बिदा
b. पर्व विदा
c. घर बिदा
d. क र ख दुबै

55. कर्मचारीको आचरणमा तलको कुन पर्दैन?

- a. दान उपहार र सापटी लिन नहुने
b. साहित्यिक कार्यक्रममा भाग लिन नहुने
c. राजनिति गर्न नहुने
d. निर्वाचनदमा भाग लिन नहुने

56. कोशी प्रदेशको आबधीक योजनाको दिर्घकालिन सोचका आधारस्तम्भहरू कतिवटा छन्?

- a. ३
b. ५
c. ७
d. ९

57. कोशी प्रदेशका कार्यालयहरूले कति महिनामा कम्तिमा एक पटक सार्वजनिक सुनुवाई गर्नुपर्दछ?

- a. २-२ महिनामा
b. ३-३ महिनामा
c. ४-४ महिनामा
d. ६-६ महिनामा

58. बेरुजु भनेको के हो?

- a. कुनै आर्थिक कारोबारमा देखापरेको अनियमितता, गल्ती, वा अपारदर्शी खर्च
b. कार्यालयमा भएका सामानहरूको अभिलेख
c. कार्यालयबाट लिलामि गरिएको सामानहरूको अभिलेख
d. लेखापरिक्षणमा देखिएको असल अभ्यास

59. लेखापरिक्षणको सन्दर्भमा देखिएको अनियमिततालाई नियमित गर्ने प्रक्रियालाई के भनिन्छ?

- a. सम्परिक्षण
b. दाखिला परिक्षण
c. जिन्सी परिक्षण
d. स्टोर परिक्षण

60. कोशी प्रदेश लोक सेवा आयोग ऐन अनुसार बैकल्पिक उमेदवारले मुख्य उमेदवार नियुक्त भएको पद रिक्त भएमा कति अबधीसम्म नियुक्ति पाउन योग्य रहन्छ?

- a. ६ महिना
b. १ वर्ष
c. २ वर्ष
d. ३ वर्ष

Section-A

Short Question (६ प्रश्न × ५ अङ्क = ३०)

1. Write down the process of water purification large scale.
2. Define Primary Health care ? Write down the Elements of PHC.
3. Write down the causative agent, incubation period, clinical features and management of Chickenpox?
4. What is supervision? How supervision can be differentiate with monitoring?
5. What do you mean by decentralization? What is the role of local government in effective health services delivery? Describe in present context.
6. Write down the organizational structure of DoHS.

Long Question (२ प्रश्न × १० अङ्क = २०)

7. Write down the vision, goal targets, milestones of CB-IMNCI programme.
8. Define Leprosy. Write down the causative agent, clinical features and management of Leprosy?

Section-B

Short Question (६ प्रश्न × ५ अङ्क = ३०)

9. What is rheumatic fever ? Explain the management of Rheumatic Fever?
10. Write down the classification of mental disorders
11. Write short note on:
A) Hernia B) Hydrocele
12. Define abortion? Write down the types of abortion with management of septic abortion.
13. Write down the management of septic shock.
14. Define otitis media. Write down the causative agent, Predisposing factors , clinical features and its management.

Long Question (२ प्रश्न × १० अङ्क = २०)

15. What is PPH ? What are the causes of PPH ? How do you manage post partum hemorrhage ?
16. Define Stroke. Write down the types, risk factor, clinical features, diagnosis and management of stroke?

1. **Ans (d)**

- The "slapped cheek" rash is a hallmark of **erythema infectiosum** (also called **fifth disease**), caused by **parvovirus B19**.

2. **Ans (b)**

- **Pentavalent antimonials** (e.g., sodium stibogluconate) are first-line treatments.
- **Amphotericin B** (including liposomal formulations) is highly effective.
- **Paromomycin** is an alternative option.
- **Spiramycin** is used for **toxoplasmosis**, not leishmaniasis.
- *Thus, the correct combination is 1, 2, and 4.*

3. **Ans (d)**

- **It is a live-attenuated vaccine.**
 - **Correct.** BCG (Bacille Calmette-Guérin) is a live but weakened strain of *Mycobacterium bovis*.
- **It is administered by intramuscular injection.**
 - **Incorrect.** BCG is given via **intra**dermal injection (not intramuscular), typically in the upper arm.
- **It is derived from *Mycobacterium bovis*.**
 - **Correct.** The vaccine strain is derived from an attenuated form of *M. bovis*.
- **It is highly immunogenic.**
 - **Correct.** BCG induces a strong T-cell immune response, though its efficacy against pulmonary tuberculosis varies.

4. **Ans (d)**

- **Statement 1 (Incorrect):** Female mites (not male) are primarily responsible for transmission, as they burrow into the skin to lay eggs.
- **Statement 2 (Correct):** Norwegian (crusted) scabies is a severe form seen in immunocompromised individuals (e.g., HIV/AIDS).
- **Statement 3 (Correct):** Permethrin 5% cream is the first-line topical treatment.
- **Statement 4 (Correct):** Itching worsens at night due to increased mite activity and after hot showers due to enhanced skin sensitivity.

5. **Ans (ans (b))**

Fine motor milestones in child development follow a predictable sequence:

1. **Copies a circle (earliest, ~3 years):**
 - Children typically master this first, as it requires simpler circular motions.
2. **Draws a circle (~3–4 years):**
 - Slightly later than copying, as it involves independent creation.
3. **Copies a cross (~4–5 years):**
 - Requires more precision (intersecting lines).
4. **Draws a cross (~5+ years):**
 - The most advanced, needing controlled line coordination.

6. **Ans (b)**

1. **Correct:** The Parkland formula calculates fluid resuscitation for burns **over 24 hours** (crystalloids like RL).
2. **Correct:** The formula is **4 mL × weight (kg) × %TBSA burned**.
3. **Correct:** Maintenance fluids (e.g., Holliday-Segar formula) are given *in addition* to resuscitation fluids in children to meet baseline metabolic needs.
4. **Incorrect:** The Parkland formula specifies **half the volume in the first 8 hours** (not 6 hours) and the remainder over the next 16 hours (not 18 hours).

Thus, **1, 2, and 3** are correct.

7. **Answer: (b) 2, 3 and 4**

Signs of good attachment (WHO/UNICEF criteria):

- **2. Mouth wide open:** Ensures a deep latch, covering most of the areola.
- **3. Chin touching the breast:** Indicates proper head positioning and effective suckling.
- **4. Lower lip everted (turned outward):** Prevents nipple trauma and aids milk transfer.

Why not statement 1?

1. **Nose at nipple level:** Incorrect. The baby's nose should be **free** (not pressed against the breast) to allow breathing. The nipple should align with the baby's **upper lip/nose tip** before latching, but the nose itself should not remain at nipple level during feeding.

Key Points for Effective Breastfeeding:

- Audible swallowing, no pain, and rounded cheeks are additional signs of good attachment.

Thus, the correct combination is **2, 3, and 4**.

8. **Answer: (c) 4 mg**

- **Standard prevention dose:** For most women, **400 µg (0.4 mg)** of folic acid daily is recommended before conception and during early pregnancy.
- **High-risk prevention (recurrence):** Women with a prior pregnancy affected by a neural tube defect (NTD) require a **higher dose of 4–5 mg daily**, starting at **least 1 month before conception** and continuing through the first trimester.

Why not other options?

- (a) **4 µg (0.004 mg):** Far too low for any clinical purpose.
- (b) **400 µg (0.4 mg):** Standard dose, but insufficient for high-risk cases.
- (d) **400 mg:** Exceeds safe limits (risk of masking vitamin B12 deficiency).

Key Guidelines:

- **WHO** and **ACOG** recommend **4–5 mg folic acid** for high-risk pregnancies (e.g., prior NTD, maternal diabetes, or anti-epileptic drug use).

9. **Answer: (c)**

- **Cholestasis jaundice** (OCPs can cause liver-related issues, including cholestasis)
- **Chloasma and acne** (Chloasma is a side effect, but acne can improve with OCPs; not a major complication)

- **Venous thromboembolism** (OCPs increase the risk of blood clots)
- **Breast cancer** (There is some evidence of a slightly increased risk, especially with long-term use)

10. **Answer: (c) 2 and 3**

- Unsaturated fatty acids have one or more double bonds in their carbon chain, while saturated fatty acids have no double bonds.

1. **Lauric acid (C12:0):**

- **Saturated** (no double bonds). Found in coconut oil.

2. **Linoleic acid (C18:2, omega-6):**

- **Polyunsaturated** (two double bonds). An essential fatty acid.

3. **Oleic acid (C18:1, omega-9):**

- **Monounsaturated** (one double bond). Abundant in olive oil.

4. **Palmitic acid (C16:0):**

- **Saturated** (no double bonds). Common in palm oil and animal fats.

Key distinctions:

- **Unsaturated:** Linoleic acid (2) and oleic acid (3).
- **Saturated:** Lauric acid (1) and palmitic acid (4).

11. **Ans (c)**

12. **Ans (c)**

- KFD, also referred to as Monkey Fever, is a tick-borne viral haemorrhagic disease, which can be fatal to humans and other primates. The causal agent, Kyasanur Forest Disease Virus (family Flaviviridae, genus Flavivirus), is a member of the tick-borne encephalitis (TBE) complex.

13. **Ans (c)**

14. **Ans (c)**

Scrub typhus, also known as bush typhus, is a disease caused by a bacteria called *Orientia Tsutsugamushi*. Scrub typhus is spread to people through bites of infected chiggers (larval mites).

15. **Ans (b)**

16. **Ans (b)**

17. **Ans (b)**

18. **Ans (d)**

19. **Ans (c)**

20. **Ans (c)**

21. **Ans (d)**

22. **Ans (d)**

23. **Ans (d)**

24. **Ans (d)**

25. **Ans (a)**

26. **Ans (b)**

- Nepal endorsed and published the national Adolescent Health and Development (NAHD) strategy in 2000.
- An implementation guideline on Adolescent

sexual and Reproductive health (ASRH) was developed in 2007 to support district health managers to operationalize the strategy.

27. **Ans (d)**

- The vision of National malaria strategic plan is a "malaria free Nepal by 2025".
- National Malaria Control programme was initiated in 1978 AD.
- World Malaria Day was celebrated every year in 25th April.

28. **Ans (a)**

- Drug of choice for pregnancy induced hypertension-Methyldopa.
- drug of choice for severe preeclampsia is labetalol

29. **Ans (c)**

- The structural unit of a bone is the osteon or the Haversian system.
- In children osteomyelitis is mainly hematogenous in origin.
- Primary cause of osteomyelitis in children is *S. aureus*.
- Osteomyelitis in children commonly involve the long bone of lower limb primarily metaphyses.

30. **Ans (d)**

Tuberculosis otitis media:

- Painless ear discharge.
- Multiple perforation of pars tensa. these may coalesce into a large single perforation.
- Hearing loss: Severe hearing loss, out of perforation.
- Malignant otitis media is caused by *pseudomonas aeruginosa*.

31. **Ans (a)**

- 1st deciduous tooth/temporary teeth to erupt - Lower central incisor, left.
- 1st permanent tooth to erupt is lower 1st molar (6 yrs)

32. **Ans (d)**

- Corneal sensation is lost in Herpes simplex.
- Enlarged corneal nerves are seen in Keratoconus, leprosy.

33. **Ans (d)**

- Most common site of appendix is retrocecal.
- Lliopsoas sign positive in retrocecal appendix.
- Obturator sign positive in pelvis appendix.
- Most pediatric patients perforate within 72 hours of symptom onset.

34. **Ans (a)**

- Acute intussusception occurs when a proximal portion of the gut becomes invaginated within an immediately adjacent distal segment.
- In early stages of disease Stool is normal but later on blood and mucus are evacuated (so called red currant jelly stool).

35. **Ans (b)**

Sympathetic nervous system:

- Allows body to function under stress
- "Fright or Flight response".
- Primes body for intense skeletal muscle activity.

Parasympathetic nervous system:

- Maintenance functions.
- Rest and digest

36. **Ans (b)**

Clinical features of Mania:

- Happy/elated mood without reason
- Decreased need to sleep
- Increased talkativeness, increased familiarity, increased socialability, increased sexual desire.
- Flight of ideas.
- Pressure of speech.

37. **Ans (b)**

Differential diagnosis of white patch of tongue:

- Oral thrush (candidiasis)most common
- Leukoplakia, oral hairy leukoplakia.
- Lichen planus

38. **Ans (b)**

* Staphylococci is the most common cause of skin infection .

* Staphylococcus cause following infection:

- Abscess
- Boil
- Carbuncle
- Ecthyma
- Toxic shock syndrome
- Staphylococcal scalded skin syndrome (SSSS)
- Bullous impetigo

39. **Ans (d)**

- Leprosy does not involve:
CNS
Lungs
Female genital tract
- Through leprosy does not involved female genital tract, if it involves, ovaries are the most common site to be involved in female genital tract.

Syphilis	Gonorrhoeae
- Commonly involves testis	- does not involve testis
- Does not involve epididymis	Common involve epididymis

40. **Ans (a)**

- Surgical treatment of prolapse uterus include anterior colporrhaphy, Manchester repair.

41. **Ans (b)**

- Delay in return of fertility is caused by: DMPA
- Emergency contraception is contraception produced to: unprotected intercourse.

42. **Ans (b)**

Recommended age of vaccination against HPV is 9-13 years or before start sexual intercourse.

43. **Ans (a)**

- Inversion of testis is the commonest cause of torsion of testis where testis lies horizontally or upside down.

44. **Ans (d)**

- Magnesium sulphate is the drug of choice in the management of eclampsia.
- Toxicity of magnesium sulphate toxicity:
 - Knee jerk reflex
 - *- urine output
 - Respiration rate
- * antidote of magnesium sulphate toxicity is calcium Gluconate

45. **Ans (a)**

- Peak incidence of colorectal carcinoma: 60-79 year.
- High fiber diet is the most protective against carcinoma of colon.

46. **Ans (a)**

47. **Ans (c)**

- Newborn infants are resistance to P. falciparum
- ABER is an index of operational efficiency.
- Infant parasite rate is most sensitive index of recent malaria transmission
- Spleen rate is used for measuring endemicity of malaria in community.
- API is the sophisticated measure of malaria incidence

48. **Ans (a)**

- Early administration of BCG vaccine provides high level protection against severe childhood tuberculosis and tubercular meningitis
- BCG vaccine doesn't protect from Pulmonary tuberculosis
- childhood deaths from TB are usually caused by meningitis or disseminated form of TB
- DOTS remain central to the public health approach to tuberculosis control.

49. **Ans (d)**

50. **Ans (d)**

- The percentage of allocation in reserved seat for Madhesi is 22%.

51.c	52.a	53.b	54.d	55.b	56.a	57.c	58.a	59.a	60.b
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