

INI CET Dermatology

Sample Paper – 5

Duration: 14 Minutes

Maximum Marks: 15

Instructions

- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the Dermatology and Venereology content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of Dermatology items you actually meet in the real 200-question paper.
- Each correct answer carries **+1 mark**. There is **negative marking of one-third (0.33) mark** for every incorrect answer; unattempted questions carry no penalty.
- Every question has **exactly one best answer**. Choose the single most appropriate option.
- Attempt this practice paper in one timed sitting of about **14 minutes**, the pace the real computer-based test demands.

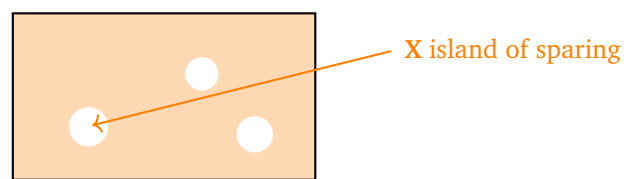
Papulosquamous and Eczematous Disorders

- Q1.** The abrupt appearance of sheets of small sterile pustules on a background of hot, tender, bright-red skin, with fever and malaise (a generalised von Zumbusch flare), indicates:
- (A) Generalised pustular psoriasis
(B) Dyshidrotic eczema (pompholyx)
(C) Impetigo
(D) Folliculitis
- Q2.** Dry, rough, cracked skin with a fine ‘crazy-paving’ network of fissures over the shins of an elderly patient during winter, worsened by frequent bathing, is:



- (A) Atopic dermatitis
- (B) Asteatotic eczema (eczema craquele)
- (C) Stasis dermatitis
- (D) Nummular eczema

Q3. The eruption sketched below shows widespread salmon orange-red scaly plaques that spread towards erythroderma yet leave sharply outlined patches of untouched normal skin ('islands of sparing', marked X), with waxy palmoplantar keratoderma. It is:



- (A) Psoriasis
- (B) Seborrhoeic dermatitis
- (C) Pityriasis rubra pilaris
- (D) Mycosis fungoides

Cutaneous Infections

Q4. A young man with an itchy, scaly, advancing annular rash in the groin and trunk (tinea cruris and corporis) develops a symmetrical, itchy vesicular eruption on the hands from which no fungus can be recovered. This secondary sterile hypersensitivity eruption is:

- (A) Allergic contact dermatitis
- (B) A secondary bacterial infection
- (C) An id reaction (dermatophytid)
- (D) Pompholyx from irritants

Q5. A febrile young child develops widespread superficial peeling with flaccid blisters that shear off under gentle pressure (positive Nikolsky sign), caused by an exfoliative toxin of *Staphylococcus aureus* splitting the granular layer. This is:

- (A) Toxic epidermal necrolysis
- (B) Bullous pemphigoid
- (C) Bullous impetigo
- (D) Staphylococcal scalded skin syndrome (SSSS)

Q6. A toddler in a summer outbreak has painful oral ulcers together with grey-roofed vesicles on the palms, soles and buttocks, caused by Cox-sackievirus A16. The diagnosis is:

- (A) Herpangina
- (B) Chickenpox
- (C) Hand-foot-and-mouth disease
- (D) Herpetic gingivostomatitis

Vesiculobullous and Autoimmune Disorders

Q7. Skin fragility with tense blisters and erosions on the backs of sun-exposed hands, healing with milia and scarring, plus facial hypertrichosis, raised urinary uroporphyrins and often chronic hepatitis C, indicates:

- (A) Bullous pemphigoid
- (B) Porphyria cutanea tarda
- (C) Dermatitis herpetiformis
- (D) Pemphigus vulgaris

Q8. A solitary, firm, indurated ivory-white plaque with a violaceous (lilac) advancing ring, showing dermal sclerosis on biopsy but no Raynaud phenomenon or internal organ involvement, is:

- (A) Systemic sclerosis
- (B) Lichen sclerosis
- (C) Necrobiosis lipoidica
- (D) Morphea (localised scleroderma)

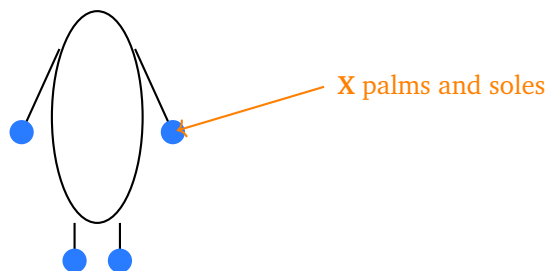


Infestations, Sexually Transmitted Infections and Leprosy

Q9. A traveller returning from sub-Saharan Africa has a painful, itchy white nodule with a central black dot on the sole of the foot, caused by a burrowing sand flea (*Tunga penetrans*). This infestation is:

- (A) Tungiasis
- (B) Cutaneous larva migrans
- (C) Scabies
- (D) Onchocerciasis

Q10. The rash mapped below is a symmetrical, non-itchy, copper-coloured papulosquamous eruption that characteristically involves the palms and soles (marked X), accompanied by moist wart-like anogenital plaques (condylomata lata). It is:



- (A) Secondary syphilis
- (B) Pityriasis rosea
- (C) Guttate psoriasis
- (D) Hand eczema

Q11. The lepromin (Mitsuda) test is read at about three to four weeks and is used to assess the host response in leprosy. A strongly positive Mitsuda reaction indicates:

- (A) Lepromatous (multibacillary) disease with poor immunity
- (B) Active infectivity that requires isolation
- (C) That it is a confirmatory diagnostic test for exposure



(D) Good cell-mediated immunity, favouring the tuberculoid pole

Pigmentary, Hair and Drug Reactions

Q12. A child with white hair, very pale skin that burns easily, photophobia, nystagmus and reduced visual acuity, from an inherited deficiency of tyrosinase blocking melanin synthesis, has:

(A) Oculocutaneous albinism

(B) Vitiligo

(C) Piebaldism

(D) Pityriasis alba

Q13. A patient on long-term systemic corticosteroids develops a sudden crop of monomorphic inflammatory papules and pustules on the trunk and shoulders, all at the same stage and without comedones. This is:

(A) Acne vulgaris

(B) Rosacea

(C) A steroid-induced acneiform eruption

(D) Perioral dermatitis

Skin Tumours and Dermatological Emergencies

Q14. A patient with advanced HIV/AIDS develops multiple violaceous (purple-brown) plaques and nodules on the skin, oral palate and lower limbs, driven by human herpesvirus 8 (HHV-8). This vascular tumour is:

(A) Bacillary angiomatosis

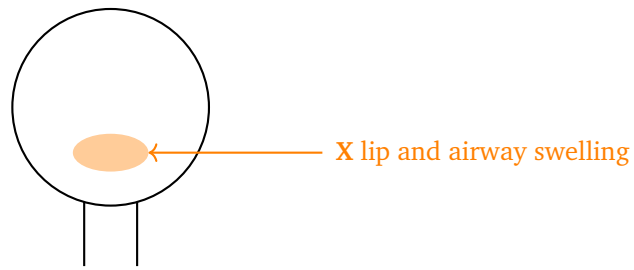
(B) Kaposi sarcoma

(C) Angiosarcoma

(D) Pyogenic granuloma

Q15. The patient sketched below develops rapidly spreading urticarial wheals with swelling of the lips, tongue and larynx (marked X) and audible stridor within minutes of a bee sting. The immediate life-saving treatment is:





- (A) Oral antihistamine
- (B) Intramuscular adrenaline (epinephrine)
- (C) Intravenous hydrocortisone
- (D) Nebulised salbutamol



Detailed Solutions**Q1.****Solution**

Concept – generalised pustular psoriasis: Pustular psoriasis is a severe variant of psoriasis in which sterile neutrophilic pustules dominate.

Step 1 – read the signs: Sheets of small sterile pustules on hot, tender, red skin with fever and malaise (a generalised von Zumbusch flare) point to generalised pustular psoriasis.

Step 2 – supporting features: It may be triggered by sudden withdrawal of systemic steroids, infection or pregnancy, and can cause systemic upset needing admission.

Why the other options are wrong:

- B, dyshidrotic eczema: gives itchy vesicles on the palms and soles, not widespread sterile pustules with fever.
- C, impetigo: gives honey-coloured crusts and is a superficial bacterial infection, not sterile pustules.
- D, folliculitis: is localised follicular pustules, not a febrile generalised eruption.

Final Answer: Generalised pustular psoriasis $\Rightarrow$ A

Answer: (A) [Go Back to Q1](#)

Q2.**Solution**

Concept – asteatotic eczema: Asteatotic eczema (eczema craquele) is a dryness-driven eczema of the elderly.

Step 1 – read the clues: Dry, cracked skin with a ‘crazy-paving’ network of fissures on the shins of an elderly patient in winter is asteatotic eczema.

Step 2 – the mechanism: Loss of surface lipids (from ageing, low humidity and over-washing) dries the stratum corneum, so it cracks like a dried river bed.

Why the other options are wrong:

- A, atopic dermatitis: is a flexural itchy eczema of the atopic patient, not winter shin cracking.
- C, stasis dermatitis: sits over varicose veins with oedema and haemosiderin



staining.

- D, nummular eczema: gives discrete coin-shaped weepy plaques, not a crazed dry surface.

Final Answer: Asteatotic eczema (eczema craquele) ⇒ B

Answer: (B) [Go Back to Q2](#)

Q3.

Solution

Concept – pityriasis rubra pilaris: Pityriasis rubra pilaris (PRP) is a papulosquamous disorder with a very typical sparing pattern.

Step 1 – read the lesion: Salmon orange-red scaly plaques spreading towards erythroderma but leaving sharply outlined ‘**islands of sparing**’ of normal skin (marked X), with waxy palmoplantar keratoderma, define PRP.

Step 2 – supporting features: Follicular keratotic papules on the dorsa of the fingers (‘nutmeg-grater’ feel) support the diagnosis.

Why the other options are wrong:

- A, psoriasis: gives silvery scale on a red base without islands of sparing.
- B, seborrhoeic dermatitis: gives greasy scale on the scalp and face, not orange plaques with sparing.
- D, mycosis fungoides: is a cutaneous T-cell lymphoma with fixed patches and plaques, not orange erythroderma with islands.

Final Answer: Pityriasis rubra pilaris ⇒ C

Answer: (C) [Go Back to Q3](#)

Q4.

Solution

Concept – the id reaction (dermatophytid): An id reaction is a sterile hypersensitivity eruption at a site distant from an active infection.

Step 1 – read the clues: Active **tinea** in the groin and trunk plus a **symmetrical, itchy, fungus-free vesicular eruption on the hands** is an **id reaction (dermatophytid)**.

Step 2 – the mechanism: Immune sensitisation to fungal antigens drives the distant eruption; it clears when the primary dermatophyte infection is treated.



Why the other options are wrong:

- A, allergic contact dermatitis: needs a contact allergen and follows the exposure site.
- B, secondary bacterial infection: would show pus and positive bacterial cultures, not sterile vesicles.
- D, pompholyx from irritants: has no link to a remote fungal focus and clears independently.

Final Answer: An id reaction (dermatophytid) $\Rightarrow$ C

Answer: (C) [Go Back to Q4](#)

Q5.

Solution

Concept – staphylococcal scalded skin syndrome: SSSS is a superficial blistering disease of young children caused by staphylococcal exfoliative toxin.

Step 1 – read the clues: A febrile young child with **widespread superficial peeling**, flaccid blisters and a **positive Nikolsky sign**, from a toxin splitting the **granular layer**, has SSSS.

Step 2 – the level of split: The exfoliative toxin cleaves desmoglein-1 high in the epidermis, so peeling is superficial and heals without scarring; mucosae are spared.

Why the other options are wrong:

- A, toxic epidermal necrolysis: splits at the dermo-epidermal junction (full-thickness) with mucosal erosions, usually drug-induced in adults.
- B, bullous pemphigoid: is a subepidermal autoimmune disease of the elderly with a negative Nikolsky sign.
- C, bullous impetigo: is localised toxin-mediated blistering, not a widespread febrile peeling.

Final Answer: Staphylococcal scalded skin syndrome (SSSS) $\Rightarrow$ D

Answer: (D) [Go Back to Q5](#)



Q6.

Solution

Concept – hand-foot-and-mouth disease: Hand-foot-and-mouth disease is a common childhood enteroviral infection.

Step 1 – read the pattern: Oral ulcers with grey-roofed vesicles on the palms, soles and buttocks in a summer outbreak, caused by Coxsackievirus A16, define hand-foot-and-mouth disease.

Step 2 – the course: It is self-limiting over about a week; care is supportive with fluids and analgesia.

Why the other options are wrong:

- A, herpangina: gives posterior oral vesicles only, without the acral rash.
- B, chickenpox: gives lesions of different stages spread over the whole trunk, not confined to hands, feet and mouth.
- D, herpetic gingivostomatitis: gives painful gum and mouth ulcers from herpes simplex, without palmar and plantar vesicles.

Final Answer: Hand-foot-and-mouth disease $\Rightarrow$ C

Answer: (C) [Go Back to Q6](#)

Q7.

Solution

Concept – porphyria cutanea tarda: Porphyria cutanea tarda (PCT) is the commonest porphyria, from reduced hepatic uroporphyrinogen decarboxylase.

Step 1 – read the features: Skin fragility, tense blisters and erosions on sun-exposed hands, milia, hypertrichosis and raised urinary uroporphyrins, often with hepatitis C, define PCT.

Step 2 – confirmation: Urine fluoresces coral-pink under a Wood lamp; raised urinary uroporphyrins confirm the diagnosis.

Why the other options are wrong:

- A, bullous pemphigoid: gives tense subepidermal bullae with linear IgG, not photosensitive fragility with porphyrins.
- C, dermatitis herpetiformis: gives intensely itchy grouped vesicles linked to coeliac disease.
- D, pemphigus vulgaris: gives flaccid intraepidermal bullae with a positive Nikolsky sign, not sun-exposed fragility.



Final Answer: Porphyria cutanea tarda ⇒ B

Answer: (B) [Go Back to Q7](#)

Q8.

Solution

Concept – morphoea (localised scleroderma): Morphoea is localised sclerosis of the skin without systemic sclerosis.

Step 1 – read the plaque: A **firm, indurated ivory-white plaque** with a **violaceous (lilac) advancing ring** and dermal sclerosis, **without Raynaud** or internal organ disease, is morphoea.

Step 2 – the distinction: The lilac border marks the active edge; unlike systemic sclerosis there is no sclerodactyly, nailfold change or visceral involvement.

Why the other options are wrong:

- A, systemic sclerosis: has Raynaud, sclerodactyly and internal organ fibrosis.
- B, lichen sclerosus: gives white atrophic ‘cigarette-paper’ plaques, typically anogenital.
- C, necrobiosis lipoidica: gives yellow-brown atrophic shin plaques with telangiectasia, linked to diabetes.

Final Answer: Morphoea (localised scleroderma) ⇒ D

Answer: (D) [Go Back to Q8](#)

Q9.

Solution

Concept – tungiasis: Tungiasis is infestation by the burrowing sand flea *Tunga penetrans*.

Step 1 – read the clues: A returning traveller with a **painful, itchy white nodule with a central black dot** on the **sole or toe** has tungiasis, from a flea burrowed into the skin.

Step 2 – management: The embedded flea is removed with a sterile needle or curette, and tetanus cover plus wound care are given.

Why the other options are wrong:

- B, cutaneous larva migrans: gives a serpiginous, migrating itchy track, not a fixed nodule with a black dot.



- C, scabies: gives generalised itchy burrows in the web spaces, not a solitary plantar nodule.
- D, onchocerciasis: causes itchy dermatitis and nodules from a filarial worm, not a burrowing flea in the sole.

Final Answer: Tungiasis ⇒

Answer: (A) [Go Back to Q9](#)

Q10.

Solution

Concept – secondary syphilis: Secondary syphilis is the disseminated stage of *Treponema pallidum* infection.

Step 1 – read the rash: A **symmetrical, non-itchy, copper-coloured papulosquamous eruption on the palms and soles** (marked X), with **condylomata lata**, is secondary syphilis.

Step 2 – confirmation: Serology (VDRL/RPR and treponemal tests) is strongly positive; palmoplantar involvement is a valuable clue.

Why the other options are wrong:

- B, pityriasis rosea: has a herald patch and a truncal ‘Christmas-tree’ rash that spares the palms and soles.
- C, guttate psoriasis: gives small scaly drop-like plaques after streptococcal throat infection, not a coppery palmoplantar rash.
- D, hand eczema: is itchy and eczematous, without condylomata lata or positive syphilis serology.

Final Answer: Secondary syphilis ⇒

Answer: (A) [Go Back to Q10](#)

Q11.

Solution

Concept – the lepromin (Mitsuda) test: The lepromin test measures the host cell-mediated response to *Mycobacterium leprae* antigen, not active infection.

Step 1 – read the test: A **strongly positive** late (Mitsuda) reaction at three to four weeks reflects **good cell-mediated immunity**, favouring the **tuberculoid** pole.

Step 2 – the interpretation: It is a prognostic and classifying tool, not a diag-



nostic test; lepromatous patients have a negative reaction because their cellular immunity is poor.

Why the other options are wrong:

- A, lepromatous disease: gives a *negative* lepromin test, the opposite of a strong reaction.
- B, active infectivity: is not what the test shows; it does not measure contagiousness.
- C, a diagnostic test: is incorrect, as the lepromin test does not confirm exposure or diagnosis.

Final Answer: Good cell-mediated immunity, favouring the tuberculoid pole ⇒

D

Answer: (D) [Go Back to Q11](#)

Q12.

Solution

Concept – oculocutaneous albinism: Oculocutaneous albinism is an inherited failure of melanin synthesis affecting skin, hair and eyes.

Step 1 – read the clues: White hair, very pale burn-prone skin, photophobia, nystagmus and reduced acuity, from **tyrosinase deficiency**, define oculocutaneous albinism.

Step 2 – the mechanism: Tyrosinase catalyses the first step of melanin production, so its deficiency leaves melanocytes present but unable to make pigment.

Why the other options are wrong:

- B, vitiligo: is acquired patchy depigmentation with normal hair colour and no eye signs.
- C, piebaldism: gives a stable white forelock and patches from absent melanocytes, without nystagmus.
- D, pityriasis alba: gives faint pale facial patches in children, not generalised pigment loss with eye signs.

Final Answer: Oculocutaneous albinism ⇒ A

Answer: (A) [Go Back to Q12](#)



Q13.

Solution

Concept – drug-induced acneiform eruption: An acneiform eruption is a sudden, monomorphic, comedone-free eruption triggered by a drug.

Step 1 – read the clues: On **systemic corticosteroids**, a sudden crop of **monomorphic papules and pustules at the same stage, without comedones**, is a steroid-induced acneiform eruption.

Step 2 – supporting features: Other causes include iodides, bromides, lithium and androgens; lesions settle when the drug is stopped.

Why the other options are wrong:

- A, acne vulgaris: is polymorphic *with* comedones and evolves over months, not an abrupt monomorphic crop.
- B, rosacea: gives central facial erythema, papules and flushing, without a drug trigger.
- D, perioral dermatitis: is grouped papules around the mouth sparing the vermilion border, often from topical steroids on the face.

Final Answer: A steroid-induced acneiform eruption ⇒

Answer: (C) [Go Back to Q13](#)

Q14.

Solution

Concept – Kaposi sarcoma: Kaposi sarcoma is a vascular tumour driven by human herpesvirus 8 (HHV-8).

Step 1 – read the clues: In **advanced HIV/AIDS**, multiple **violaceous plaques and nodules** on the skin, palate and legs, driven by **HHV-8**, indicate Kaposi sarcoma.

Step 2 – management: Restoring immunity with antiretroviral therapy is central; extensive disease may need local or systemic treatment.

Why the other options are wrong:

- A, bacillary angiomatosis: gives friable vascular papules caused by *Bartonella* and responds to antibiotics.
- C, angiosarcoma: is an aggressive endothelial malignancy, typically on the head and scalp of the elderly, not HHV-8-driven AIDS lesions.



- D, pyogenic granuloma: is a solitary bleeding vascular nodule at a site of trauma, not multiple HHV-8 plaques.

Final Answer: Kaposi sarcoma $\Rightarrow$

Answer: (B) [Go Back to Q14](#)

Q15.

Solution

Concept – anaphylaxis with angioedema: Anaphylaxis is a rapid, life-threatening IgE-mediated reaction with airway, breathing and circulation compromise.

Step 1 – read the emergency: Urticarial wheals with **lip, tongue and laryngeal swelling** (marked X) and **stridor** minutes after a bee sting is anaphylaxis with angioedema.

Step 2 – the immediate treatment: Intramuscular adrenaline (epinephrine) into the anterolateral thigh is the first, life-saving step; supportive oxygen, fluids, antihistamine and steroids follow.

Why the other options are wrong:

- A, oral antihistamine: is far too slow and does not reverse airway compromise.
- C, intravenous hydrocortisone: helps prevent later relapse but is not the immediate life-saving drug.
- D, nebulised salbutamol: relieves bronchospasm but does not treat laryngeal angioedema or shock.

Final Answer: Intramuscular adrenaline (epinephrine) $\Rightarrow$

Answer: (B) [Go Back to Q15](#)



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	A	2	B	3	C	4	C	5	D
6	C	7	B	8	D	9	A	10	A
11	D	12	A	13	C	14	B	15	B

