

INI CET Dermatology

Sample Paper – 9

Duration: 14 Minutes

Maximum Marks: 15

Instructions

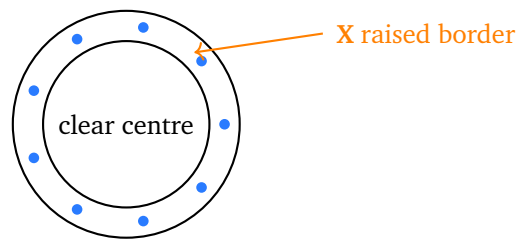
- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the Dermatology and Venereology content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of Dermatology items 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.** When the silvery scale of an extensor plaque is scraped away layer by layer with a curette (the Grattage test / method of Brocq), the last membrane peels off to reveal pinpoint bleeding points (the Auspitz sign). These paired signs are classic for:
- (A) Lichen planus
 - (B) Pityriasis rosea
 - (C) Psoriasis
 - (D) Seborrhoeic dermatitis
- Q2.** The ring-shaped (annular) lesion sketched below has a raised firm border with central clearing (marked X), but shows *no* surface scale, is made of



skin-coloured dermal papules over the dorsum of the hand, and is KOH-negative. The most likely diagnosis is:



- (A) Tinea corporis
- (B) Erythema annulare centrifugum
- (C) Erythema migrans
- (D) Granuloma annulare

Q3. A child with known atopic dermatitis suddenly develops fever and crops of monomorphic, punched-out vesicles and erosions spreading rapidly over the eczematous skin. This dermatological emergency, from disseminated herpes simplex virus, is:

- (A) Impetigo
- (B) A contact dermatitis flare
- (C) Bullous pemphigoid
- (D) Eczema herpeticum

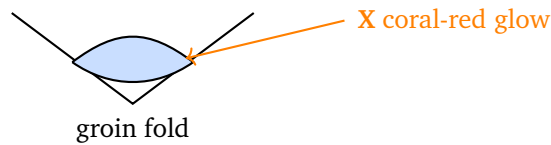
Cutaneous Infections

Q4. A patient with long-standing tinea pedis develops a symmetrical, itchy vesicular eruption on both palms that is KOH-negative and clears once the foot infection is treated. This distant, sterile eruption is:

- (A) Pompholyx from a new allergen
- (B) An id (autoeczematisation) reaction
- (C) Secondary bacterial infection
- (D) Dyshidrotic contact dermatitis



- Q5.** The intertriginous patch sketched below is an asymptomatic, well-demarcated red-brown scaly plaque in the groin that glows **coral-red** under a Wood lamp (marked **X**). Caused by *Corynebacterium minutissimum*, it is:



- (A) Tinea cruris
 - (B) Candidal intertrigo
 - (C) Inverse psoriasis
 - (D) Erythrasma
- Q6.** A slowly enlarging reddish-brown plaque on the face of a young adult contains soft nodules that show an 'apple-jelly' colour when pressed with a glass slide (diascopy). This chronic paucibacillary form of cutaneous tuberculosis is:
- (A) Lupus vulgaris
 - (B) Lupus pernio
 - (C) Scrofuloderma
 - (D) Discoid lupus erythematosus

Vesiculobullous and Autoimmune Disorders

- Q7.** A child develops tense blisters arranged in an annular 'string of pearls' (cluster of jewels) pattern around older healing lesions, with **linear IgA** deposition along the basement membrane on immunofluorescence. This is:
- (A) Bullous pemphigoid
 - (B) Dermatitis herpetiformis
 - (C) Linear IgA bullous dermatosis (chronic bullous disease of childhood)
 - (D) Pemphigus vulgaris



Q8. Violaceous, indurated plaques over the nose and cheeks (lupus pernio) together with tender red nodules on the shins (erythema nodosum) and bilateral hilar lymphadenopathy on the chest radiograph suggest:

- (A) Sarcoidosis
- (B) Systemic lupus erythematosus
- (C) Tuberculosis
- (D) Rosacea

Infestations, Sexually Transmitted Infections and Leprosy

Q9. To confirm a scabies burrow at the bedside, washable ink is rubbed over a suspicious web-space lesion and then wiped away with an alcohol swab; the dye is retained along a fine dark zigzag track. This test is the:

- (A) Burrow ink test
- (B) Tzanck smear
- (C) Wood lamp examination
- (D) Nikolsky sign

Q10. A patient with untreated syphilis has passed the primary chancre and the secondary rash, and is now free of any lesion with only reactive serology on testing. This clinical stage is:

- (A) Primary syphilis
- (B) Secondary syphilis
- (C) Latent syphilis
- (D) Tertiary syphilis

Q11. Under the WHO criteria, which one of the following is a cardinal sign used to diagnose leprosy?

- (A) A painful vesicular dermatomal rash
- (B) Honey-coloured crusting around the mouth



- (C) A hypopigmented, anaesthetic patch with a thickened peripheral nerve
- (D) A photosensitive malar (butterfly) rash

Pigmentary, Hair and Drug Reactions

Q12. A child has ill-defined, pale, slightly scaly patches on the cheeks that are more obvious after sun exposure, with *normal* sensation and a negative KOH scraping. The most likely cause of this localised hypopigmentation is:

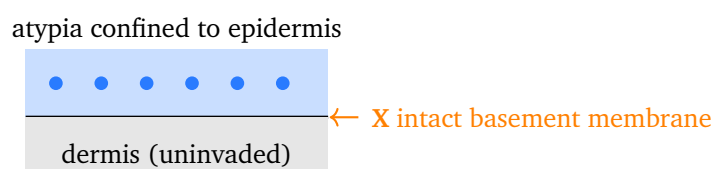
- (A) Vitiligo
- (B) Pityriasis alba
- (C) Pityriasis versicolor
- (D) Indeterminate leprosy

Q13. A patient starting cytotoxic chemotherapy develops rapid, near-complete scalp hair loss within two weeks, affecting the actively growing hairs whose shafts break easily. This pattern of shedding is:

- (A) Telogen effluvium
- (B) Anagen effluvium
- (C) Alopecia areata
- (D) Androgenetic alopecia

Skin Tumours and Dermatological Emergencies

Q14. On sun-damaged skin showing field cancerisation, the schematic below marks a persistent red scaly plaque whose full-thickness epidermal atypia stays *above* an intact basement membrane (marked X), with no invasion. This squamous cell carcinoma in situ is:



- (A) Bowen disease
- (B) Invasive squamous cell carcinoma
- (C) Basal cell carcinoma
- (D) Actinic keratosis

Q15. A patient admitted with toxic epidermal necrolysis has the severity and mortality risk estimated on admission using a seven-parameter prognostic score (age, malignancy, heart rate, body-surface detachment, serum urea, glucose and bicarbonate). This score is the:

- (A) PASI
- (B) SCORTEN
- (C) SCORAD
- (D) Breslow thickness



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

Concept – clinical signs of psoriasis: Psoriasis is a chronic immune-mediated disorder of accelerated epidermal turnover, and it has two bedside signs that are often tested together.

Step 1 – the Grattage test: Scraping the plaque repeatedly with a curette (the method of Brocq) makes the loose scale come away as fine silvery flakes, like scraping candle wax.

Step 2 – the Auspitz sign: Once the last thin membrane is peeled off, tiny pinpoint bleeding points appear, because the dermal papillae reach high up with dilated capillaries just under a thinned epidermis.

Why the other options are wrong:

- A, lichen planus: gives violaceous polygonal papules with Wickham striae, not silvery scale or the Auspitz sign.
- B, pityriasis rosea: gives a herald patch and a 'Christmas-tree' truncal rash with collarette scale.
- D, seborrhoeic dermatitis: gives greasy yellow scale on the scalp and face, without pinpoint bleeding.

Final Answer: Psoriasis ⇒

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

Q2.**Solution**

Concept – the differential of an annular lesion: Not every ring-shaped lesion is ringworm; the presence or absence of scale is the key discriminator.

Step 1 – read the surface: The lesion has a raised firm border and central clearing but **no surface scale**, and the KOH scraping is negative, so a fungal cause is excluded.

Step 2 – identify the tissue level: Firm skin-coloured dermal papules forming a ring over the dorsum of the hand, without epidermal change, are typical of **granuloma annulare**, a benign dermal reaction.

Why the other options are wrong:



- A, tinea corporis: has an active scaly advancing edge and is KOH-positive.
- B, erythema annulare centrifugum: shows a trailing scale just inside the expanding red rim.
- C, erythema migrans: is the enlarging red ring of Lyme disease with a history of a tick bite.

Final Answer: Granuloma annulare $\Rightarrow$

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

Q3.

Solution

Concept – eczema herpeticum: Eczema herpeticum is disseminated herpes simplex virus infection of skin already damaged by eczema, and it is a dermatological emergency.

Step 1 – read the clues: A child with atopic dermatitis who suddenly develops **fever** and **monomorphic, punched-out** vesicles and erosions spreading fast over eczematous skin has eczema herpeticum.

Step 2 – act on it: The broken skin barrier lets HSV spread widely; prompt systemic aciclovir (and ophthalmology review if near the eyes) is needed to prevent serious complications.

Why the other options are wrong:

- A, impetigo: gives honey-coloured crusts, not monomorphic punched-out vesicles with fever.
- B, a contact dermatitis flare: is itchy and eczematous with a trigger, not punched-out erosions.
- C, bullous pemphigoid: causes tense blisters in the elderly, not an acute febrile viral spread in a child.

Final Answer: Eczema herpeticum $\Rightarrow$

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



Q4.

Solution

Concept – the id (autoeczematisation) reaction: An id reaction is a sterile, generalised eczematous response to a focus of infection or inflammation elsewhere on the body.

Step 1 – read the link: A patient with **tinea pedis** develops a symmetrical itchy vesicular eruption on the palms that is **KOH-negative**, so the palmar lesions contain no fungus themselves.

Step 2 – confirm the mechanism: The eruption is an immune (hypersensitivity) reaction to the distant fungal antigens, and it settles once the foot infection is treated, which is the hallmark of an id reaction.

Why the other options are wrong:

- A, pompholyx from a new allergen: would not be tied to clearance of the foot infection.
- C, secondary bacterial infection: would show pustules and honey crusts, not sterile KOH-negative vesicles.
- D, dyshidrotic contact dermatitis: implies a direct contact trigger on the palms, not a distant focus.

Final Answer: An id (autoeczematisation) reaction ⇒ **B**

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

Q5.

Solution

Concept – erythrasma: Erythrasma is a superficial infection of the skin folds by *Corynebacterium minutissimum*.

Step 1 – read the patch: A **well-demarcated red-brown scaly** patch in the groin that is largely asymptomatic points to erythrasma.

Step 2 – use the Wood lamp: The bacteria produce coproporphyrin III, so the patch fluoresces a **coral-red (pink)** colour under a Wood lamp, which is diagnostic.

Why the other options are wrong:

- A, tinea cruris: has an active scaly advancing edge and is KOH-positive, and does not fluoresce coral-red.
- B, candidal intertrigo: is moist and beefy-red with satellite pustules, not



coral-red fluorescent.

- C, inverse psoriasis: gives smooth shiny red plaques in the folds, without coral-red fluorescence.

Final Answer: Erythrasma ⇒

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

Q6.

Solution

Concept – lupus vulgaris: Lupus vulgaris is the commonest chronic paucibacillary form of cutaneous tuberculosis in a sensitised host.

Step 1 – read the plaque: A slowly enlarging **reddish-brown plaque on the face** that spreads over years suggests lupus vulgaris.

Step 2 – do diascopy: Pressing a glass slide over the nodules blanches the redness and reveals a translucent ‘**apple-jelly**’ colour, the classic sign of the granulomas of lupus vulgaris.

Why the other options are wrong:

- B, lupus pernio: is the violaceous nose/cheek plaque of sarcoidosis, not tuberculosis.
- C, scrofuloderma: is cutaneous tuberculosis overlying an infected lymph node or bone with sinuses, not an apple-jelly facial plaque.
- D, discoid lupus erythematosus: gives scarring, scaly, photosensitive plaques with follicular plugging, not apple-jelly nodules.

Final Answer: Lupus vulgaris ⇒

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

Q7.

Solution

Concept – linear IgA bullous dermatosis: Linear IgA bullous dermatosis in children is also called chronic bullous disease of childhood.

Step 1 – read the pattern: **Tense blisters** forming an annular ‘string of pearls’ (cluster of jewels) around older healing lesions in a child are characteristic.

Step 2 – confirm on immunofluorescence: Direct immunofluorescence shows **linear IgA** deposition along the basement membrane, which names the disease



and separates it from its mimics.

Why the other options are wrong:

- A, bullous pemphigoid: shows linear IgG and C3, not linear IgA, and is mainly a disease of the elderly.
- B, dermatitis herpetiformis: shows granular IgA at the dermal papillae and is linked to coeliac disease.
- D, pemphigus vulgaris: has flaccid intraepidermal blisters with intercellular IgG, not tense subepidermal linear IgA.

Final Answer: Linear IgA bullous dermatosis (chronic bullous disease of childhood) ⇒

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

Q8.

Solution

Concept – cutaneous sarcoidosis: Sarcoidosis is a multisystem granulomatous disease with several distinctive skin signs.

Step 1 – read the specific sign: **Lupus pernio**, violaceous indurated plaques over the nose and cheeks, is a specific cutaneous sign of sarcoidosis.

Step 2 – add the reactive sign and systemic clue: **Erythema nodosum** on the shins (a reactive panniculitis) plus **bilateral hilar lymphadenopathy** together strongly favour sarcoidosis.

Why the other options are wrong:

- B, systemic lupus erythematosus: gives a photosensitive malar rash, not lupus pernio with hilar nodes.
- C, tuberculosis: can cause erythema nodosum but not lupus pernio, and the classic node pattern differs.
- D, rosacea: causes facial flushing, papules and pustules, without erythema nodosum or hilar lymphadenopathy.

Final Answer: Sarcoidosis ⇒

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



Q9.

Solution

Concept – the burrow ink test: The burrow ink test is a simple bedside method to confirm a scabies burrow.

Step 1 – apply the ink: Washable ink is rubbed over a suspicious web-space lesion so that it seeps into the tunnel dug by the mite.

Step 2 – read the result: Wiping the surface with an alcohol swab removes the surface ink but leaves dye trapped along a fine **dark zigzag track**, outlining the burrow and confirming scabies.

Why the other options are wrong:

- B, Tzanck smear: looks for multinucleate giant cells in herpes or pemphigus, not for burrows.
- C, Wood lamp examination: detects fluorescent infections such as erythrasma, not scabies burrows.
- D, Nikolsky sign: tests for epidermal shearing in blistering diseases, not for mite tunnels.

Final Answer: Burrow ink test ⇒ A

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

Q10.

Solution

Concept – the stages of syphilis: Untreated syphilis passes through primary, secondary, latent and tertiary stages.

Step 1 – place the patient: The chancre (primary) and the mucocutaneous rash (secondary) have both resolved, and there is **no lesion** left to find.

Step 2 – name the silent stage: When the patient is asymptomatic but **serology stays reactive**, the disease is in the **latent** stage, before any late (tertiary) gummatous or cardiovascular disease appears.

Why the other options are wrong:

- A, primary syphilis: is the stage of the painless chancre, which has already passed.
- B, secondary syphilis: is the stage of the generalised rash and mucous patches, also resolved.



- D, tertiary syphilis: shows gummas, neurosyphilis or aortitis, none of which is present here.

Final Answer: Latent syphilis ⇒

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

Q11.

Solution

Concept – the WHO cardinal signs of leprosy: The WHO defines three cardinal signs, and any one is enough to diagnose leprosy.

Step 1 – list the signs: They are a hypopigmented or reddish **anaesthetic patch**, a **thickened peripheral nerve** with loss of sensation or weakness, and **acid-fast bacilli** on a slit-skin smear.

Step 2 – match the option: The choice describing a **hypopigmented, anaesthetic patch with a thickened peripheral nerve** combines two of these cardinal signs, so it is the correct answer.

Why the other options are wrong:

- A, a painful vesicular dermatomal rash: describes herpes zoster.
- B, honey-coloured crusting: describes impetigo.
- D, a photosensitive malar rash: describes lupus erythematosus.

Final Answer: A hypopigmented, anaesthetic patch with a thickened peripheral nerve ⇒

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

Q12.

Solution

Concept – localised hypopigmentation: Several conditions give pale patches, and the clues are sensation, scale and the KOH result.

Step 1 – read the clues: A child with **ill-defined, faintly scaly pale patches on the cheeks** that are more obvious after sun exposure, with **normal sensation** and a **negative KOH**, fits pityriasis alba.

Step 2 – confirm the pattern: Pityriasis alba is a mild eczematous, post-inflammatory hypopigmentation common in atopic children, and it fades slowly with emollients and sun protection.



Why the other options are wrong:

- A, vitiligo: gives sharply demarcated, completely depigmented milky-white macules, not faint scaly patches.
- C, pityriasis versicolor: would be KOH-positive with a 'spaghetti and meat-balls' appearance.
- D, indeterminate leprosy: would show sensory changes over the patch, which are absent here.

Final Answer: Pityriasis alba $\Rightarrow$ B

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

Q13.

Solution

Concept – anagen effluvium: Anagen effluvium is abrupt loss of hairs that are in the active growth (anagen) phase.

Step 1 – read the trigger and timing: Cytotoxic chemotherapy halts mitosis in the hair matrix, so the growing shafts narrow and break within **one to three weeks**, causing rapid near-complete loss.

Step 2 – confirm the mechanism: About 85 to 90 per cent of scalp hairs are in anagen at any time, which is why the loss is so extensive; it is usually reversible once the drug is stopped.

Why the other options are wrong:

- A, telogen effluvium: is diffuse shedding of resting hairs about three months after a stressor, not within two weeks.
- C, alopecia areata: gives discrete round bald patches with exclamation-mark hairs, not diffuse drug-related loss.
- D, androgenetic alopecia: is slow patterned thinning driven by androgens, not acute chemotherapy loss.

Final Answer: Anagen effluvium $\Rightarrow$ B

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



Q14.

Solution

Concept – Bowen disease and field cancerisation: Field cancerisation means a whole area of sun-damaged skin carries the genetic changes that predispose to multiple tumours.

Step 1 – read the histology: A persistent red scaly plaque whose **full-thickness epidermal atypia stays above an intact basement membrane** (marked X), with no invasion, is squamous cell carcinoma **in situ**.

Step 2 – name it: Squamous cell carcinoma in situ of the skin is called **Bowen disease**; it may progress to invasive carcinoma if the atypical cells breach the basement membrane.

Why the other options are wrong:

- B, invasive squamous cell carcinoma: by definition breaks through the basement membrane, which has not happened here.
- C, basal cell carcinoma: is a pearly nodule with telangiectasia arising from basal keratinocytes, not full-thickness atypia.
- D, actinic keratosis: shows only partial-thickness (lower epidermal) atypia, not full-thickness in-situ change.

Final Answer: Bowen disease $\Rightarrow$ A

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

Q15.

Solution

Concept – the SCORTEN score: SCORTEN is the validated prognostic score for toxic epidermal necrolysis and Stevens-Johnson syndrome.

Step 1 – recall the parameters: It uses seven items scored on admission: **age** over 40, **malignancy**, **heart rate** over 120, **body-surface detachment** over 10 per cent, and raised serum **urea**, **glucose** and low **bicarbonate**.

Step 2 – use the result: Each positive item scores one point, and a higher total predicts higher mortality, guiding intensive supportive care.

Why the other options are wrong:

- A, PASI: is the Psoriasis Area and Severity Index, used for psoriasis, not TEN.
- C, SCORAD: scores atopic dermatitis severity, not TEN.



- D, Breslow thickness: measures melanoma depth for staging, not a TEN prognosis.

Final Answer: SCORTEN $\Rightarrow$ B

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



Answer Key

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

