Patrol Officer (BS-14), National Highways & Motorway Police (NH&MP), Ministry of Communications — 2019 · Solved Past Paper

Body: Federal Public Service Commission (FPSC) · **Post:** Patrol Officer (BS-14), National Highways & Motorway Police (NH&MP), Ministry of Communications · **Year:** 2019 · **Questions:** 96 in the original paper — **95 solved and verified**, 1 excluded as defective (Q28) · **Price:** Free

> **How to use this paper:** each question shows the stem, the four options, and the correct answer. Click “Why each option?” under a question to see all four options explained — one question teaches four topics. General Knowledge answers are as of the 2019 sitting.

Source note: testkaro.net quiz 'Motorway Police Patrol Officer 28 Apr 2019 Batch 1' (accessed 13 Nov 2026; 96 questions extracted in full from the quiz data file, with the site's own printed keys). The site labels the quiz 'TestKaro-created practice, not an official syllabus, paper, answer key, or publication', and its options are its own reconstruction; the site's JS shuffles option order at runtime, so the filed option order is the source's, not necessarily the original paper's. Second source mcq-ai.com 'FPSC Patrol Officer (NH&MP) 2019' (94 questions on record, options written by that site) corroborates about 85 stems and supplies the Q19 full stem ('Such boys...' — testkaro drops 'Such') and the Q69 correction (keys Al-Ghareeb). 95 VERIFIED (including 1 printed-key correction: Q69 Khabar-e-Wahid C->B Al-Ghareeb, Hasan being a grade of authenticity not a subtype by narrator count) + 1 DEFECTIVE-excluded (Q28 number puzzle: no consistent rule derives printed key C 333 from both pairs; digit-sum rules giving 333 for the first pair give 648 for the second),

y the assistant under the owner's 8 Nov 2026 delegation. 11 items in the second source do not appear in the primary bank and are NOT filed here (the paper is 96 MCQs and the primary source supplies all 96; they most likely belong to the other 2019 batches and are held as leads for the Batch 2 paper, 37ban). Dedup 13 Nov 2026 vs all 77 live FPSC papers (6,942 stems): 0 exact matches, 0 first-8-word matches — not a duplicate paper. No live Patrol Officer 2019 paper exists (live index carries only the 2020 paper for this post).

Question 1 English

He was refused permission to sit _____ the examination.

- A. in
- B. for ✓ **Correct answer**
- C. about
- D. None of these

A. "Sit in the examination" is wrong: "sit in" means to attend as an observer, as in "sit in on a class".

B. "Sit for an examination" is the fixed expression for taking an exam, so "refused permission to sit for the examination" is correct.

C. "Sit about" has no meaning in connection with an exam.

D. Wrong, since "for" is the correct preposition.

Question 2 English

I told him this straight _____ his face.

- A. to ✓ **Correct answer**
- B. on
- C. upon
- D. None of these

to his face" is the idiom: saying something directly and openly in a person's presence.

B. "On his face" would mean something physically resting on his face, not speaking openly.

C. "Upon his face" has the same problem as "on": it describes a physical position, not direct speech.

D. Wrong, since "to" is correct.

Question 3 English

Don't let him _____ you.

- A. deceive ✓ **Correct answer**
- B. deceiving
- C. to deceive
- D. None of these

A. "Let" is followed by an object and the bare infinitive, so "Don't let him deceive you" is correct.

B. The -ing form cannot follow "let" in this pattern.

C. "Let him to deceive" is ungrammatical; "to" is not used after "let" (it is used after "allow").

D. Wrong, since "deceive" is correct.

Question 4 English

Columbus _____ America more than four hundred years ago.

- A. has discovered
- B. discovered ✓ **Correct answer**

discovered

- D. None of these

A. The present perfect cannot be used with a definite past time expression such as "more than four hundred years ago".

B. A completed action at a definite past time takes the simple past: "Columbus discovered America".

C. The past perfect needs a second past event for it to come before, which the sentence does not give.

D. Wrong, since "discovered" is correct.

Question 5 English

He sat _____ the shade of the tree.

- A. under ✓ **Correct answer**
- B. below
- C. beneath
- D. None of these

A. Among the options offered, "under" is the best: one sits "under the tree", and "under the shade of the tree" is an attested phrase.

B. "Below the shade" is wrong; "below" describes a lower position, not being in shade.

C. "Beneath the shade" is wrong for the same reason as "below".

D. Wrong: "under" fits, so "None of these" is not needed. NOTE: the most idiomatic form is "in the shade", but "in" is not offered.

Question 6 English

He is PLANNING TO SETTLE in Lahore AS SOON AS he WILL RETIRE in April next year.

part with an error.

- A. WILL RETIRE ✓ **Correct answer**
- B. AS SOON AS
- C. PLANNING TO SETTLE
- D. None of these

A. After "as soon as", a future time clause takes the simple present, not "will": the sentence should read "as soon as he retires".

B. "As soon as" is the correct conjunction for this time clause.

C. "Is planning to settle" is correct present continuous for a future plan.

D. Wrong, since "WILL RETIRE" is the faulty part.

Question 7 English

DID NOT YOUR TEACHER instruct you TO REVISE YOUR ANSWER IF TIME WAS AVAILABLE. Identify the part with an error.

- A. DID NOT YOUR TEACHER ✓ **Correct answer**
- B. TO REVISE YOUR ANSWER
- C. IF TIME WAS AVAILABLE
- D. None of these

A. In a negative question the "not" comes after the subject: "Did your teacher not instruct you...?" (or "Didn't your teacher...?").

B. "Instruct you to revise your answer" is correct: "instruct" takes an object plus a to-infinitive.

C. "If time was available" is a correct conditional clause here.

D. Wrong, since the first part is the faulty one. NOTE: this follows the error-spotting convention used in these papers, where the misplaced "not" is the marked error.

8 English

It is ME WHO called you here to CONTACT ME. Identify the part with an error.

- A. ME ✓ **Correct answer**
- B. WHO
- C. CONTACT ME
- D. None of these

A. The subject complement after "It is" takes the subject form: "It is I who called you".

B. "Who" is correct here: it is the subject of "called".

C. "To contact me" is a correct infinitive of purpose.

D. Wrong, since "ME" is the faulty part.

Question 9 English

EXCEPT he ALL WERE present there. Identify the part with an error.

- A. EXCEPT ✓ **Correct answer**
- B. ALL
- C. WERE
- D. None of these

A. The phrase "Except he" is wrong: after "except" the pronoun must be in the object form, "Except for him", so the fault lies in this part.

B. "All were present" is correct.

C. "Were" agrees with the plural subject "all".

D. Wrong, since the first part is the faulty one. NOTE: the precise fault is the pronoun "he", which should be "him"; "he" is not offered as a part, so EXCEPT is the part the key marks.

10 English

When he visited THE FAIR last time ACCOMPANYING his friend, he bought NO LESS than twenty. Identify the part with an error.

- A. THE FAIR
- B. ACCOMPANYING
- C. NO LESS ✓ **Correct answer**
- D. None of these

A. "Visited the fair" is correct.

B. "Accompanying his friend" is a correct participle phrase.

C. With a countable number ("twenty"), the correct form is "no fewer than twenty", not "no less".

D. Wrong, since "NO LESS" is the faulty part.

Question 11 English

In the sentence 'He ran MORE QUICKLY than I,' the capitalized phrase functions as a:

- A. Noun
- B. Adjective
- C. Adverb ✓ **Correct answer**
- D. None of these

A. "More quickly" does not name a person, place or thing, so it is not a noun.

B. An adjective describes a noun; "more quickly" describes the verb "ran", so it is not an adjective.

C. "More quickly" tells how he ran, so it modifies the verb and is an adverb (comparative degree).

D. Wrong, since "Adverb" is correct.

12 English

In 'About half of this GIGANTIC area is mainly under French control,' the capitalized word is a:

- A. Noun
- B. Adjective ✓ **Correct answer**
- C. Adverb
- D. None of these

A. "Gigantic" does not name a thing, so it is not a noun.

B. "Gigantic" describes the noun "area" (how big it is), so it is an adjective.

C. An adverb modifies a verb or adjective; "gigantic" modifies the noun "area", so it is not an adverb.

D. Wrong, since "Adjective" is correct.

Question 13 English

Identify the type of sentence: 'To keep any more mosquitoes from coming in while the lights were on.'

- A. Simple sentence
- B. Compound Sentence
- C. Complex Sentence ✓ **Correct answer**
- D. None of these

A. A simple sentence has one independent clause only, but this sentence carries a subordinate clause ("while the lights were on"), so it is not simple.

B. A compound sentence joins two independent clauses with a conjunction, which this sentence does not do.

C. The sentence contains a subordinate clause ("while the lights were on") attached to the

ve phrase, which is what makes it a complex sentence.

D. Wrong, since "Complex Sentence" is correct. NOTE: as printed the sentence is a fragment (an infinitive phrase plus a subordinate clause); the keyed classification is Complex because of the subordinate clause.

Question 14 English

In 'He visited the bazaar TO BUY a book,' the capitalized part is a/an:

- A. Infinitive ✓ **Correct answer**
- B. Participle
- C. Gerund
- D. None of these

A. "To buy" is the base verb with "to": the to-infinitive, here an infinitive of purpose (why he visited the bazaar).

B. A participle is an -ing or -ed form used as an adjective; "to buy" is not one.

C. A gerund is an -ing form used as a noun; "to buy" is not one.

D. Wrong, since "Infinitive" is correct.

Question 15 English

In 'BRAVO! You have done well,' the capitalized word is a/an:

- A. Adjective
- B. Conjunction
- C. Interjection ✓ **Correct answer**
- D. None of these

A. "Bravo" does not describe a noun, so it is not an adjective.

B. A conjunction joins words or clauses; "Bravo" joins nothing.

an exclamation expressing sudden praise, standing apart from the rest of the sentence: that is an interjection.

D. Wrong, since "Interjection" is correct.

Question 16 English

To test for acidity, it is best to _____ paper.

- A. to use litmus
- B. use litmus ✓ **Correct answer**
- C. using
- D. None of these

A. "It is best to to use litmus paper" would repeat "to" and is wrong.

B. After "it is best to", the bare infinitive "use" completes the phrase: "it is best to use litmus paper".

C. "It is best to using litmus paper" is ungrammatical; the -ing form cannot follow "to" here.

D. Wrong, since "use litmus" is correct.

Question 17 English

I did not know the answer, and _____.

- A. neither did he ✓ **Correct answer**
- B. so did he
- C. he didn't too
- D. None of these

A. To add a second negative statement we use "neither" + auxiliary + subject with inverted order: "and neither did he".

adds a positive statement, but the sentence is negative ("I did not know").

C. "He didn't too" is ungrammatical: "too" cannot carry the negative addition; "either" or "neither" is needed.

D. Wrong, since "neither did he" is correct.

Question 18 English

He could not resist _____ that new shirt.

- A. buy
- B. buying ✓ **Correct answer**
- C. to buy
- D. None of these

A. "Resist buy" is ungrammatical; "resist" never takes a bare infinitive.

B. "Resist" is followed by a gerund: "could not resist buying that new shirt".

C. "Resist to buy" is wrong; "resist" takes the -ing form, not the to-infinitive.

D. Wrong, since "buying" is correct.

Question 19 English

Such boys _____ are late will be fined.

- A. who
- B. that
- C. as ✓ **Correct answer**
- D. None of these

A. "Who" is the relative pronoun for people, but after "such" the relative word is "as", so "who" is not the keyed answer here.

B. "That" can introduce a relative clause, but after "such" the fixed relative word is "as".

...ch" comes before a noun and is followed by a relative clause, the relative word is "as": "Such boys as are late will be fined".

D. Wrong, since "as" is correct. NOTE: testkaro's rendering of the stem drops the word "Such" ("Boys _____ are late will be fined"); the second source (mcq-ai) carries the full stem "Such boys _____ are late will be fined", and the key "as" only works with "Such" present, so the full stem is filed here.

Question 20 English

If the telephone _____, please say that I will be back at seven.

- A. rings ✓ **Correct answer**
- B. is ringing
- C. will ring
- D. None of these

A. In a first conditional the if-clause takes the simple present for a possible future event: "If the telephone rings".

B. "Is ringing" describes an action in progress now, not a possible future event.

C. "Will" is not normally used in the if-clause of a condition.

D. Wrong, since "rings" is correct.

Question 21 Mathematics

Find the next number: 2, 5, 12, 23, 38, 57, _____

- A. 69
- B. 76
- C. 80 ✓ **Correct answer**
- D. None of these

A. 69 would mean adding 12 to 57, but the differences are rising by 4 each time, so the

ıce is 23, not 12.

B. 76 would mean adding 19 again, but the differences keep rising, so 19 cannot repeat.

C. The differences are 3, 7, 11, 15, 19, rising by 4 each time, so the next difference is 23 and 57 + 23 = 80.

D. Wrong, since 80 is correct.

Question 22 Mathematics

Complete the series: 3, 6, 15, _____, 123, 366

- A. 34
- B. 42 ✓ **Correct answer**
- C. 59
- D. None of these

A. Working backwards from 123: 123 = 3n - 3 gives n = 42, not 34 (34 x 3 - 3 = 99, not 123).

B. Each term is three times the previous term minus 3: 3 x 3 - 3 = 6, 6 x 3 - 3 = 15, 15 x 3 - 3 = 42, 42 x 3 - 3 = 123, 123 x 3 - 3 = 366.

C. 59 x 3 - 3 = 174, not 123, so 59 breaks the series.

D. Wrong, since 42 is correct.

Question 23 Mathematics

Find the next number: 1, 2, 5, 12, 27, 58, _____

- A. 121 ✓ **Correct answer**
- B. 135
- C. 136
- D. None of these

A. Each term is double the previous term plus a number rising by 1: 1 x 2 + 0 = 2, 2 x 2 + 1

= 12, 12 x 2 + 3 = 27, 27 x 2 + 4 = 58, so the next is 58 x 2 + 5 = 121.

B. 135 would need adding 77 to 58, which fits no pattern in the series.

C. 136 would need adding 78 to 58, which fits no pattern in the series.

D. Wrong, since 121 is correct.

Question 24 Mathematics

Find the next number: 4, 11, 7, 14, 10, 17, _____

- A. 13 ✓ **Correct answer**
- B. 20
- C. 24
- D. None of these

A. The series alternates adding 7 and subtracting 4: 4 + 7 = 11, 11 - 4 = 7, 7 + 7 = 14, 14 - 4 = 10, 10 + 7 = 17, so the next step is 17 - 4 = 13.

B. 20 would mean adding 3 to 17, breaking the alternation.

C. 24 would mean adding 7 twice in a row, breaking the alternation.

D. Wrong, since 13 is correct.

Question 25 Mathematics

Find the next number: 2, 6, 12, 20, 30, 42, _____

- A. 50
- B. 54
- C. 56 ✓ **Correct answer**
- D. None of these

A. 50 would mean adding 8 to 42, but the differences are rising by 2 each time, so the next difference is 14, not 8.

mean adding 12 again, but the differences keep rising, so 12 cannot repeat.

C. The differences are 4, 6, 8, 10, 12, rising by 2 each time, so the next difference is 14 and 42 + 14 = 56 (the terms are also 1 x 2, 2 x 3, 3 x 4, 4 x 5, 5 x 6, 6 x 7, so the next is 7 x 8 = 56).

D. Wrong, since 56 is correct.

Question 26 Mathematics

Find the missing number: 6, 8, 10, 11, 14, 15, _____

- A. 16
- B. 12
- C. 18 ✓ **Correct answer**
- D. None of these

A. 16 would continue the even-position sequence (8, 11, 15...), but the seventh term belongs to the odd-position sequence.

B. 12 fits no sequence in the list: it is below both the odd and even progressions at this point.

C. The terms in odd positions are 6, 10, 14, rising by 4 each time, and the seventh term belongs to this sequence, so it is 14 + 4 = 18.

D. Wrong, since 18 is correct.

Question 27 Mathematics

If 17 (112) 39, what replaces the (?) in 28 (?) 49?

- A. 144
- B. 154 ✓ **Correct answer**
- C. 164
- D. None of these

I need the outer numbers to add to 72 (144 / 2), but 28 + 49 = 77.

B. The bracketed number is twice the sum of the outer numbers: (17 + 39) x 2 = 112, so (28 + 49) x 2 = 77 x 2 = 154.

C. 164 would need the outer numbers to add to 82, but 28 + 49 = 77.

D. Wrong, since 154 is correct.

Question 28 Mathematics

If 234 (333) 257, what replaces the (?) in 345 (?) 678?

- A. 133
- B. 233
- C. 333
- D. None of these

No answer is given for this question, and none is taught. No correct option — DEFECTIVE-excluded (decided by assistant under owner's 8 Nov delegation; printed key C "333" is WRONG)

A. 133 follows from no rule that fits the first pair: the digit-sum rules that produce 333 from 234 and 257 give 648 for 345 and 678, not 133.

B. 233 follows from no rule either: it is 100 less than the printed key and matches no digit-sum or difference rule that fits both pairs.

C. The printed key, but wrong: the digit-sum rule that gives 333 for the first pair (9 x 14 = 126, plus 9 x 23 = 207, totalling 333) gives 648 for the second pair (12 x 21 = 252, plus 12 x 33 = 396), and the difference rule gives 23 for the first pair, not 333.

D. "None of these" is not filed as the answer: the question asks for a number, and the item as printed has no derivable value at all, so the question itself is broken rather than answerable by elimination. EVIDENCE: the second pair's difference (678 - 345) happens to

which suggests a transcription error in the numbers as reproduced — the difference rule would fit both pairs if the first pair read 234 and 567 — but that is not what is printed, so nothing is asserted.

Question 29 Mathematics

Anwar buys a car for Rs. 44,000 and sells it for Rs. 48,000. What is his profit percentage?

- A. 9.09% ✓ **Correct answer**
- B. 12%
- C. 14%
- D. None of these

A. Profit = 48,000 - 44,000 = Rs. 4,000, and profit percentage is always worked out on the cost price: 4,000 / 44,000 x 100 = 9.09%.

B. 12% of 44,000 would be Rs. 5,280, not the Rs. 4,000 profit made.

C. 14% of 44,000 would be Rs. 6,160, not the Rs. 4,000 profit made.

D. Wrong, since 9.09% is correct.

Question 30 Mathematics

Mr. Khan buys a car for Rs. 90,000 and sells it for Rs. 80,000. What is his loss percentage?

- A. 11.11% ✓ **Correct answer**
- B. 12.31%
- C. 55.51%
- D. None of these

A. Loss = 90,000 - 80,000 = Rs. 10,000, and loss percentage is worked out on the cost price: 10,000 / 90,000 x 100 = 11.11%.

B. No calculation on the given figures produces 12.31%.

tion on the given figures produces 55.51%.

D. Wrong, since 11.11% is correct.

Question 31 Mathematics

A number's 3% equals 60. What is the number?

- A. 2000 ✓ **Correct answer**
- B. 3000
- C. 6000
- D. None of these

A. If 3% of the number is 60, then 1% is 60 / 3 = 20, and the whole number is 20 x 100 = 2,000.

B. 3% of 3,000 is 90, not 60.

C. 3% of 6,000 is 180, not 60.

D. Wrong, since 2,000 is correct.

Question 32 Mathematics

A number's 5% equals 35. What is the number?

- A. 500
- B. 600
- C. 700 ✓ **Correct answer**
- D. None of these

A. 5% of 500 is 25, not 35.

B. 5% of 600 is 30, not 35.

C. If 5% of the number is 35, then 1% is 35 / 5 = 7, and the whole number is 7 x 100 = 700.

nce 700 is correct.

Question 33 Mathematics

14 taps fill a swimming pool in 10 hours. How long would 5 taps take?

- A. 26 hours
- B. 27 hours
- C. 28 hours ✓ **Correct answer**
- D. None of these

A. Fewer taps take longer, and 14 x 10 / 5 = 28, not 26.

B. 27 does not follow from the inverse proportion 14 x 10 / 5.

C. The work is fixed: 14 taps x 10 hours = 140 tap-hours, so 5 taps need 140 / 5 = 28 hours.

D. Wrong, since 28 hours is correct.

Question 34 Mathematics

A number's 25% equals 75. What is the number?

- A. 300 ✓ **Correct answer**
- B. 500
- C. 600
- D. None of these

A. 25% is one quarter, so if a quarter of the number is 75, the whole number is 75 x 4 = 300.

B. 25% of 500 is 125, not 75.

C. 25% of 600 is 150, not 75.

D. Wrong, since 300 is correct.

35 Mathematics

8 machines finish a job in 10 days. How many days would 16 machines take?

- A. 5 days ✓ **Correct answer**
- B. 6 days
- C. 7 days
- D. None of these

A. The work is fixed: 8 machines x 10 days = 80 machine-days, so 16 machines need 80 / 16 = 5 days.

B. 6 days would need about 13.3 machines, not 16.

C. 7 days would need about 11.4 machines, not 16.

D. Wrong, since 5 days is correct.

Question 36 Mathematics

120 labourers build a building in 30 days. How long would 80 labourers take for the same work?

- A. 30 days
- B. 35 days
- C. 45 days ✓ **Correct answer**
- D. None of these

A. 30 days is the time for 120 labourers; fewer labourers take longer.

B. 35 days does not follow from the inverse proportion 120 x 30 / 80.

C. The work is fixed: 120 labourers x 30 days = 3,600 labourer-days, so 80 labourers need 3,600 / 80 = 45 days.

D. Wrong, since 45 days is correct.

37 Mathematics

Akhtar buys a sweater for Rs. 200 and sells it for Rs. 250. What is his profit?

- A. Rs. 20
- B. Rs. 40
- C. Rs. 50 ✓ **Correct answer**
- D. None of these

A. The profit is 250 - 200 = Rs. 50, not Rs. 20.

B. The profit is 250 - 200 = Rs. 50, not Rs. 40.

C. Profit = selling price - cost price = 250 - 200 = Rs. 50.

D. Wrong, since Rs. 50 is correct.

Question 38 Mathematics

A number's 20% equals 100. What is the number?

- A. 400
- B. 500 ✓ **Correct answer**
- C. 600
- D. None of these

A. 20% of 400 is 80, not 100.

B. 20% is one fifth, so if one fifth of the number is 100, the number is 100 x 5 = 500.

C. 20% of 600 is 120, not 100.

D. Wrong, since 500 is correct.

Question 39 Mathematics

Majid buys a pair of shoes for Rs. 300 and sells it for Rs. 370. What is his profit?

70 ✓ Correct answer

- B. Rs. 75
- C. Rs. 80
- D. None of these

A. Profit = selling price - cost price = 370 - 300 = Rs. 70.

B. 370 - 300 = 70, not 75.

C. 370 - 300 = 70, not 80.

D. Wrong, since Rs. 70 is correct.

Question 40 Mathematics

105 workers complete a bridge in 45 days. How long would 90 workers take?

- A. 52.5 days ✓ **Correct answer**
- B. 61 days
- C. 68.7 days
- D. None of these

A. The work is fixed: 105 workers x 45 days = 4,725 worker-days, so 90 workers need 4,725 / 90 = 52.5 days.

B. 61 days does not follow from the inverse proportion 105 x 45 / 90.

C. 68.7 days does not follow from the inverse proportion 105 x 45 / 90.

D. Wrong, since 52.5 days is correct.

Question 41 General Knowledge

Which Indian politician was expelled from the BJP after authoring a book portraying Jinnah favourably?

- A. L.K. Advani

- C. Swami Prasad Maurya
- D. None of these

A. Advani praised Jinnah during a 2005 visit to Karachi and faced criticism, but he was not expelled from the BJP.

B. Jaswant Singh was expelled from the BJP in August 2009 soon after publishing "Jinnah: India, Partition, Independence", which portrayed Jinnah favourably.

C. Maurya left the BJP in 2022 for political reasons, not over a book on Jinnah.

D. Wrong, since Jaswant Singh is correct.

Question 42 General Knowledge

In the early 2000s, East Timor gained independence from which country?

- A. Portugal
- B. Spain
- C. Indonesia ✓ **Correct answer**
- D. None of these

A. East Timor was a Portuguese colony until 1975, but independence was won from Indonesian rule, not Portuguese rule.

B. Spain never ruled East Timor.

C. Indonesia invaded and annexed East Timor in 1975; after the 1999 referendum the territory was run by the UN, and it became fully independent on 20 May 2002.

D. Wrong, since Indonesia is correct.

Question 43 General Knowledge

Through the Brexit referendum, British voters chose to leave:

- B. OSCE
- C. the Commonwealth
- D. the European Union ✓ **Correct answer**

A. The UK remains a member of NATO; Brexit did not touch it.

B. The UK remains a member of the OSCE; Brexit did not touch it.

C. The UK remains a member of the Commonwealth; Brexit did not touch it.

D. In the referendum of 23 June 2016 British voters chose to leave the European Union, which the UK formally left on 31 January 2020. NOTE: the second source (mcq-ai) carries this question without the EU among the options and keys "None of these"; the primary source (testkaro) lists the EU as option D, and that version is filed here.

Question 44 General Knowledge

President Trump announced US withdrawal from which of the following?

- A. UNHRC
- B. UNESCO
- C. the TPP
- D. All of these ✓ **Correct answer**

A. Trump did withdraw the US from the UN Human Rights Council (June 2018), but that is only one of three withdrawals, so A alone is incomplete.

B. Trump did announce withdrawal from UNESCO (October 2017), but that is only one of three, so B alone is incomplete.

C. Trump did pull the US out of the Trans-Pacific Partnership (January 2017), but that is only one of three, so C alone is incomplete.

D. All three withdrawals happened in Trump's first term, so "All of these" is the complete

Question 45 General Knowledge

Where is the SAARC Secretariat located?

- A. Kathmandu ✓ **Correct answer**
- B. Dhaka
- C. New Delhi
- D. None of these

A. The SAARC Secretariat was set up in Kathmandu, Nepal, on 16 January 1987.

B. Dhaka hosted the first SAARC summit in December 1985, where the association was founded, but the Secretariat is not there.

C. New Delhi is not the seat of the SAARC Secretariat.

D. Wrong, since Kathmandu is correct.

Question 46 General Knowledge

The CASA-1000 project is primarily concerned with:

- A. economic development in general
- B. electricity transmission ✓ **Correct answer**
- C. regional security arrangements
- D. None of these

A. CASA-1000 supports development only indirectly; its defining purpose is power transmission.

B. CASA-1000 (Central Asia-South Asia) is a project to carry surplus summer hydropower from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan through high-voltage lines.

C. CASA-1000 is an energy project, not a security arrangement.

nce electricity transmission is correct.

Question 47 General Knowledge

The JCPOA agreement primarily deals with:

- A. Iran's nuclear program ✓ **Correct answer**
- B. Obama's memoir 'A Promised Land'
- C. Both A and B
- D. None of these

A. The Joint Comprehensive Plan of Action, agreed in Vienna in July 2015 between Iran and the P5+1, limited Iran's uranium enrichment in return for sanctions relief.

B. "A Promised Land" is Barack Obama's memoir (2020); it has nothing to do with the JCPOA.

C. Wrong, since only A is true: the JCPOA is about Iran's nuclear program, not Obama's memoir.

D. Wrong, since A is correct.

Question 48 General Knowledge

What does the abbreviation ICRC stand for?

- A. International Committee of the Red Cross ✓ **Correct answer**
- B. International Criminal Court
- C. International Committee for Refugees
- D. None of these

A. ICRC stands for the International Committee of the Red Cross, founded in Geneva in 1863 and guardian of the Geneva Conventions.

B. The International Criminal Court is the ICC, a different body based in The Hague.

ody is called the ICRC, refugee work is done by the UNHCR.

D. Wrong, since A is correct.

Question 49 Pakistan Studies

Pakistan's Nasr missile is classified as a:

- A. short-range ballistic missile ✓ **Correct answer**
- B. close-range ballistic missile
- C. long-range ballistic missile
- D. None of these

A. Nasr (Hatf-IX), first tested in April 2011, is a short-range, nuclear-capable tactical ballistic missile with a range of about 60 to 70 km.

B. "Close-range" is not the standard classification used for Nasr; the missile is classed as short-range.

C. Nasr's range is about 60 to 70 km, far below long-range systems such as Shaheen-II.

D. Wrong, since short-range is correct.

Question 50 General Knowledge

Which country's military announced the 'Cold Start' doctrine?

- A. North Korea
- B. China
- C. India ✓ **Correct answer**
- D. None of these

A. North Korea has no doctrine called Cold Start.

B. China has no doctrine called Cold Start.

C. Cold Start is an Indian Army doctrine developed around 2004 after the slow 2001-02

, envisaging quick, limited offensives into Pakistan by integrated battle groups.

D. Wrong, since India is correct.

Question 51 General Knowledge

Which US President withdrew the United States from the Anti-Ballistic Missile (ABM) Treaty?

- A. George W. Bush ✓ **Correct answer**
- B. Barack Obama
- C. Donald Trump
- D. None of these

A. President George W. Bush gave notice in December 2001 that the US would leave the 1972 Anti-Ballistic Missile Treaty, and the withdrawal took effect in June 2002.

B. Obama withdrew the US from other agreements but not the ABM Treaty, which had already ended in 2002.

C. Trump withdrew from the INF Treaty in 2019, a different arms-control agreement.

D. Wrong, since George W. Bush is correct.

Question 52 General Knowledge

Who said, 'The cost of one modern heavy bomber is... a modern brick school in more than 30 cities... two fine, fully equipped hospitals'?

- A. John F. Kennedy
- B. Dwight D. Eisenhower ✓ **Correct answer**
- C. Harry S. Truman
- D. None of these

A. Kennedy did not give this speech; the "Chance for Peace" address was Eisenhower's.

Eisenhower said it in his "Chance for Peace" speech of 16 April 1953: "The cost of one modern heavy bomber is this: a modern brick school in more than 30 cities... two fine, fully equipped hospitals".

C. Truman left office in January 1953, before this April 1953 speech.

D. Wrong, since Eisenhower is correct.

Question 53 General Knowledge

Article 51 of the UN Charter concerns:

- A. the right to self-defense ✓ **Correct answer**
- B. non-military intervention
- C. human rights
- D. None of these

A. Article 51 of the UN Charter preserves the inherent right of individual or collective self-defence if an armed attack occurs against a member state, until the Security Council acts.

B. Non-military measures are covered by Article 41, not Article 51.

C. Human rights are dealt with elsewhere in the Charter, not in Article 51.

D. Wrong, since the right to self-defense is correct.

Question 54 General Knowledge

What is the name of Israel's parliament?

- A. Knesset ✓ **Correct answer**
- B. Majlis
- C. Diet
- D. None of these

A. Israel's unicameral legislature is the Knesset, with 120 members sitting in Jerusalem.

the name of the parliament in countries such as Iran, not Israel.

C. The Diet is the national parliament of Japan, not Israel.

D. Wrong, since Knesset is correct.

Question 55 General Knowledge

The OPCW is the international body responsible for monitoring:

- A. nuclear weapons
- B. biological weapons
- C. chemical weapons ✓ **Correct answer**
- D. None of these

A. Nuclear weapons are monitored under the Non-Proliferation Treaty and by the IAEA, not the OPCW.

B. Biological weapons fall under the Biological Weapons Convention, not the OPCW.

C. The Organisation for the Prohibition of Chemical Weapons, based in The Hague, implements the 1993 Chemical Weapons Convention and verifies the destruction of chemical weapons stockpiles.

D. Wrong, since chemical weapons is correct.

Question 56 Pakistan Studies

Who was serving as Chief Minister of Sindh around the time of this paper (2019)?

- A. Murad Ali Shah ✓ **Correct answer**
- B. Syed Qaim Ali Shah
- C. Syed Sardar Ahmed
- D. None of these

A. Murad Ali Shah served as Chief Minister of Sindh from 2016 to 2023, so he held the post

B. Qaim Ali Shah was Chief Minister of Sindh until 2016, before Murad Ali Shah took over.

C. Sardar Ahmed was a senior MQM leader and Speaker of the Sindh Assembly, never Chief Minister.

D. Wrong, since Murad Ali Shah is correct. NOTE: the "(2019)" in the stem is the primary source's own gloss, dating the question to this paper.

Question 57 Pakistan Studies

Which is generally regarded as the oldest language spoken in present-day Pakistan?

- A. Sindhi ✓ **Correct answer**
- B. Punjabi
- C. Pashto
- D. None of these

A. Sindhi is generally regarded as the oldest language spoken in present-day Pakistan, tracing back through the Indus Valley region and old Indo-Aryan roots.

B. Punjabi is widely spoken in Pakistan but is not generally regarded as the oldest language there.

C. Pashto is an old language of the region, but the standard answer to this question is Sindhi.

D. Wrong, since Sindhi is the standard answer. NOTE: "generally regarded" is the question's own wording: the claim is a matter of scholarly convention, and Sindhi is the answer the papers expect.

Question 58 Pakistan Studies

Which category has traditionally been Pakistan's largest export earner?

- B. Leather
- C. Cotton/textile products ✓ **Correct answer**
- D. None of these

A. Rice is a major export of Pakistan but has not traditionally been the largest export earner.

B. Leather goods are exported, but leather is not Pakistan's largest export earner.

C. Cotton and textile products (yarn, cloth, garments) have traditionally been Pakistan's largest export earner.

D. Wrong, since cotton/textile products is correct.

Question 59 Pakistan Studies

Who became the first Chief Minister of Sindh after Pakistan's independence?

- A. Ayub Khuhro ✓ **Correct answer**
- B. Pir Ilahi Bakhsh
- C. G.M. Syed
- D. None of these

A. Ayub Khuhro became the first Chief Minister of Sindh after independence in 1947.

B. Pir Ilahi Bakhsh served as Chief Minister of Sindh later (1948-1949), not first.

C. G.M. Syed was a Sindhi nationalist leader and writer, never Chief Minister of Sindh.

D. Wrong, since Ayub Khuhro is correct.

Question 60 Pakistan Studies

The Sufi poet Waris Shah is buried at:

- A. Jandiala Sher Khan ✓ **Correct answer**

- C. Lahore
- D. None of these

A. Waris Shah, the 18th-century Punjabi Sufi poet of Heer Ranjha, was born at Jandiala Sher Khan (in present Sheikhupura district) and his tomb is there.

B. Kasur is associated with the poet Bulleh Shah, not with Waris Shah's burial.

C. Lahore is not where Waris Shah is buried.

D. Wrong, since Jandiala Sher Khan is correct.

Question 61 Pakistan Studies

What is recognised as Pakistan's national flower?

- A. Rose
- B. Jasmine ✓ **Correct answer**
- C. Tulip
- D. None of these

A. The rose is a widely grown flower in Pakistan but is not the national flower.

B. Jasmine (chambeli/motia) is recognised as Pakistan's national flower.

C. The tulip is the national flower of countries such as Turkey and the Netherlands, not Pakistan.

D. Wrong, since Jasmine is correct.

Question 62 Pakistan Studies

On what date was Pakistan Broadcasting (now Radio Pakistan) established?

- A. August 14, 1947 ✓ **Correct answer**
- B. August 14, 1948

ember 23, 1947

- D. None of these

A. Pakistan Broadcasting (Radio Pakistan) was established on 14 August 1947, the day of independence, as the Pakistan Broadcasting Service.

B. The Karachi radio station was inaugurated on 14 August 1948, a year later; that is not the date Radio Pakistan was established.

C. 25 December is the Quaid-e-Azam's birthday, not the date Radio Pakistan was established.

D. Wrong, since 14 August 1947 is correct.

Question 63 Pakistan Studies

Which was the first radio station to become part of Pakistan at independence in 1947?

- A. Peshawar ✓ **Correct answer**
- B. Lahore
- C. Karachi
- D. Rawalpindi

A. The Peshawar station was the first to be commissioned in the territories that became Pakistan: it started broadcasting on 6 March 1935, and it was one of the stations in existence at independence in 1947.

B. The Lahore station was inaugurated later, on 16 December 1937.

C. Karachi had no radio station at independence; its station was inaugurated on 14 August 1948.

D. Rawalpindi's station came later (1948), not first. NOTE: one reproduction page claims Karachi was first, but that is wrong: the Peshawar 1935 date is confirmed by the Pakistan Press Foundation's radio history and by the standard Radio Pakistan history (Peshawar

e 1937, Dhaka 1939, Karachi 1948).

Question 64 Pakistan Studies

In which year did Islamabad formally take over from Rawalpindi as Pakistan's capital?

- A. 1965
- B. 1967 ✓ **Correct answer**
- C. 1969
- D. None of these

A. In 1965 Islamabad was still under construction and Rawalpindi was the interim capital.

B. The government formally shifted and Islamabad was declared the permanent capital on 14 August 1967.

C. By 1969 Islamabad had already been the capital for two years.

D. Wrong, since 1967 is correct.

Question 65 Pakistan Studies

Ayub Khan's political autobiography is titled:

- A. Friends Not Masters ✓ **Correct answer**
- B. The Myth of Independence
- C. Idea of Pakistan
- D. None of these

A. Ayub Khan's political autobiography is "Friends Not Masters" (1967).

B. "The Myth of Independence" is by Zulfikar Ali Bhutto, not Ayub Khan.

C. "The Idea of Pakistan" is by Stephen P. Cohen, not Ayub Khan.

D. Wrong, since "Friends Not Masters" is correct.

66 Pakistan Studies

The Tarbela Dam is constructed on which river?

- A. Indus ✓ **Correct answer**
- B. Jhelum
- C. Chenab
- D. None of these

A. Tarbela Dam, completed in 1976 in Haripur district, is built on the Indus River and is the largest earth-filled dam in the world by volume.

B. Mangla Dam is on the Jhelum, not Tarbela.

C. The Chenab has barrages, not Tarbela Dam.

D. Wrong, since Indus is correct.

Question 67 Islamic Studies

The knowledge that describes the names, character and biography of narrators (Rijal) of Hadith is called:

- A. Ilm Asma-ur-Rijal ✓ **Correct answer**
- B. Ilm Hadith
- C. Ilm Tafsir
- D. None of these

A. Ilm Asma-ur-Rijal is the science of the narrators' names, character and biographies, used to judge the reliability of Hadith narrators.

B. Ilm Hadith is the general science of Hadith, not the specific study of narrators' biographies.

C. Ilm Tafsir is the science of explaining the Quran, not of Hadith narrators.

D. Wrong, since Ilm Asma-ur-Rijal is correct.

68 Islamic Studies

A Hadith is generally said to consist of how many parts?

- A. 1
- B. 2 ✓ **Correct answer**
- C. 3
- D. None of these

A. A Hadith has two parts, not one.

B. A Hadith consists of two parts: the Sanad (chain of narrators) and the Matan (the text).

C. A Hadith has two parts, not three.

D. Wrong, since 2 is correct.

Question 69 Islamic Studies

Which of the following is a recognised subtype of Khabar-e-Wahid (a solitary report)?

- A. Al-Hasan
- B. Al-Ghareeb ✓ **Correct answer**
- C. Both A and B
- D. None of these

A. Al-Hasan is a grade of authenticity (Sahih, Hasan, Daif), not a subtype of Khabar-e-Wahid by number of narrators.

B. Khabar-e-Wahid (a solitary report) is divided by the number of its narrators into Mashhoor, Aziz and Ghareeb, so Al-Ghareeb is a recognised subtype.

C. The printed key, but wrong: only Al-Ghareeb is a subtype by narrator count; Al-Hasan belongs to a different classification (by strength), so "both" cannot be right.

D. Wrong, since Al-Ghareeb is correct. NOTE: the correction is corroborated by the second source (mcq-ai), which keys the same question to Al-Ghareeb and explains that Hasan is a

henticity, not a division by narrator count.

Question 70 Islamic Studies

The basic categories used to classify Hadith by the Prophet's mode of conveying it include:

- A. Hadith-e-Fa'ili (based on an action)
- B. Hadith-e-Taqriri (based on tacit approval)
- C. Both A and B ✓ **Correct answer**
- D. None of these

A. Hadith-e-Fa'ili (the Prophet's actions) is one of the basic categories, but it is not the only one.

B. Hadith-e-Taqriri (the Prophet's tacit approval) is one of the basic categories, but it is not the only one.

C. By content, Hadith are of three basic kinds: Qawli (sayings), Fa'ili (actions) and Taqriri (tacit approval), so both Fa'ili and Taqriri are among the basic categories.

D. Wrong, since both A and B are basic categories.

Question 71 Islamic Studies

Who is the author of 'Al-Mu'jam Al-Kabir'?

- A. Imam Tabarani ✓ **Correct answer**
- B. Imam Bukhari
- C. Imam Muslim
- D. None of these

A. Al-Mu'jam Al-Kabir is the largest of three Hadith collections compiled by Imam Abul Qasim Sulaiman al-Tabarani (died 360 AH).

B. Imam Bukhari compiled Sahih al-Bukhari, not Al-Mu'jam Al-Kabir.

slim compiled Sahih Muslim, not Al-Mu'jam Al-Kabir.

D. Wrong, since Imam Tabarani is correct.

Question 72 Islamic Studies

In Hadith terminology, 'Sanad' refers to:

- A. the base of a book
- B. financial support
- C. the chain of narrators ✓ **Correct answer**
- D. None of these

A. "The base of a book" is not what Sanad means in Hadith terminology.

B. "Financial support" is not what Sanad means in Hadith terminology.

C. In Hadith science, Sanad is the chain of narrators through whom a report reached the compiler; the authenticity of a report rests on it.

D. Wrong, since the chain of narrators is correct. NOTE: literally, "sanad" means support (something leaned on and relied upon), which is why the second source (mcq-ai) keys a differently worded version of this question to "Support"; in Hadith terminology, the technical meaning is the chain of narrators, and that is the version filed here.

Question 73 Islamic Studies

In Hadith terminology, 'Matan' refers to:

- A. the foundation of belief
- B. a general topic
- C. the actual wording/text of a Hadith ✓ **Correct answer**
- D. None of these

A. "The foundation of belief" is not what Matan means in Hadith terminology.

l topic" is not what Matan means; Matan is the specific wording of a report.

C. Matan (matn) is the actual text or wording of a Hadith that comes after the chain of narrators.

D. Wrong, since the actual wording/text is correct.

Question 74 Islamic Studies

Who is the author of 'Ikhtisar Uloom Al-Hadith' (a condensation of Ibn al-Salah's Muqaddimah)?

- A. Salim bin Eid
- B. Imam Suyuti
- C. Imam Ibn Kathir ✓ **Correct answer**
- D. None of these

A. Salim bin Eid al-Hilali only edited a modern edition of the work; he did not write it.

B. Imam Suyuti wrote Tadrib al-Rawi, a different work, not Ikhtisar Uloom Al-Hadith.

C. Ikhtisar Uloom Al-Hadith is Imam Ibn Kathir's abridgement of Ibn al-Salah's Muqaddimah.

D. Wrong, since Imam Ibn Kathir is correct.

Question 75 Islamic Studies

Who wrote the well-known Hadith commentary 'Tadrib Al-Rawi fi Sharh Taqrib Al-Nawawi'?

- A. Imam Jalaluddin Suyuti ✓ **Correct answer**
- B. Imam Ibn Hajar
- C. Imam Sakhawi
- D. Imam Tahawi

Rawi fi Sharh Taqrib Al-Nawawi, a commentary on Imam Nawawi's Al-Taqrib, was written by Imam Jalal al-Din al-Suyuti (died 911 AH).

B. Imam Ibn Hajar wrote Nukhbat al-Fikr and Fath al-Bari, not Tadrib Al-Rawi.

C. Imam al-Sakhawi wrote Fath al-Mughith, not Tadrib Al-Rawi.

D. Imam al-Tahawi wrote works on creed and jurisprudence, not Tadrib Al-Rawi. NOTE: the second source (mcq-ai) carries this question without Suyuti among the options and keys "None of these"; the primary source (testkaro) lists Suyuti as option A, and that version is filed here.

Question 76 Islamic Studies

Who is the author of 'Muqaddimah Ibn al-Salah', a foundational work on the science of Hadith?

- A. Imam Nawawi
- B. Imam Sakhawi
- C. Imam Ibn al-Salah ✓ **Correct answer**
- D. None of these

A. Imam Nawawi abridged the Muqaddimah in Al-Irshad and Al-Taqrib, but he did not write the Muqaddimah itself.

B. Imam al-Sakhawi wrote commentaries on Hadith sciences, not the Muqaddimah.

C. The Muqaddimah (full title "Ulum al-Hadith") was written by Abu Amr Uthman Ibn al-Salah al-Shahrazuri (died 643 AH) and became the standard textbook of Hadith principles.

D. Wrong, since Imam Ibn al-Salah is correct.

Question 77 Everyday Science

The time period of a simple pendulum's swing mainly depends on its:

- B. amplitude
- C. length ✓ **Correct answer**
- D. None of these

A. The mass of the bob cancels out of the pendulum's equation of motion, so the period does not depend on mass.

B. For small swings the period is practically independent of amplitude.

C. For a simple pendulum, the period is T = 2 pi times the square root of L over g, so it depends on the length L (and on gravity g).

D. Wrong, since length is correct.

Question 78 Everyday Science

A body undergoing simple harmonic motion is described as a harmonic:

- A. oscillator ✓ **Correct answer**
- B. amplifier
- C. pendulum
- D. None of these

A. Any system whose restoring force is proportional to its displacement performs simple harmonic motion and is called a harmonic oscillator; a pendulum is one example of such a body.

B. An amplifier is an electronic device that increases signal strength, not a body in simple harmonic motion.

C. A pendulum is one example of a harmonic oscillator, not the general name for a body in simple harmonic motion.

D. Wrong, since oscillator is correct.

79 Everyday Science

Planets remain in orbit around the sun mainly because of:

- A. centripetal force alone
- B. centrifugal force
- C. gravitational attraction between them ✓ **Correct answer**
- D. None of these

A. Centripetal force names the role (the inward force needed for curved motion), not the cause; the cause is gravity.

B. Centrifugal force is only an apparent force in a rotating frame, not what holds planets in orbit.

C. Planets orbit the sun because of the gravitational attraction between the sun and each planet, as described by Newton's law of universal gravitation.

D. Wrong, since gravitational attraction is correct.

Question 80 Everyday Science

The requirement to wear a seatbelt is best explained by Newton's:

- A. First Law ✓ **Correct answer**
- B. Second Law
- C. Third Law
- D. None of these

A. Newton's first law (inertia) says a body keeps moving with the same velocity unless an external force acts on it; when a car stops suddenly, the passenger's body continues moving forward, and the seatbelt supplies the force that stops it.

B. The second law tells how large the stopping force is, but the need for the belt arises from inertia, the first law.

aw (action and reaction) does not explain why a seatbelt is needed.

D. Wrong, since the First Law is correct.

Question 81 Everyday Science

A region of space from which nothing, not even light, can escape is called a:

- A. nova
- B. black hole ✓ **Correct answer**
- C. white hole
- D. None of these

A. A nova is a sudden brightening of a star, not a region from which nothing can escape.

B. A black hole is a region where gravity is so strong that the escape velocity exceeds the speed of light, so nothing, including light, can get out once it crosses the event horizon.

C. A white hole is the hypothetical reverse: a region that nothing can enter, not one that nothing can leave.

D. Wrong, since black hole is correct.

Question 82 Everyday Science

Which of the following statements is NOT true?

- A. Velocity is a vector quantity
- B. Velocity can be negative
- C. Speed can be negative ✓ **Correct answer**
- D. None of these

A. True: velocity has both magnitude and direction, so it is a vector.

B. True: along a straight line, a negative velocity simply means motion in the chosen negative direction.

speed is a scalar equal to the magnitude of velocity (distance covered per unit time), so it can never be negative.

D. Wrong, since C is the statement that is not true.

Question 83 Everyday Science

What is the ratio of a body's inertial mass to its gravitational mass?

- A. 0.5
- B. 1 ✓ **Correct answer**
- C. 2
- D. None of these

A. The two masses are equal, so their ratio is not 0.5.

B. Experiments from Galileo and Eotvos to modern satellite tests show inertial mass and gravitational mass are equal, so their ratio is 1; this equivalence underlies Einstein's equivalence principle.

C. The two masses are equal, so their ratio is not 2.

D. Wrong, since 1 is correct.

Question 84 Everyday Science

The dimensional formula of torque is the same as that of:

- A. kinetic energy ✓ **Correct answer**
- B. pressure
- C. momentum
- D. None of these

A. Torque = force times perpendicular distance, giving dimensions [M L squared T to the power minus 2], the same as work and every form of energy, including kinetic energy.

has dimensions [M L to the power minus 1 T to the power minus 2], not the same as torque.

C. Momentum has dimensions [M L T to the power minus 1], not the same as torque.

D. Wrong, since kinetic energy is correct. NOTE: the second source (mcq-ai) carries this question with different options ("Kinetic energy / Pressure energy / Moment of force / All of these") and keys "All of these"; the primary source's version is filed here.

Question 85 Everyday Science

The moment of linear momentum about a point is called:

- A. impulse
- B. torque
- C. angular momentum ✓ **Correct answer**
- D. None of these

A. Impulse is the change in linear momentum (force times time), not the moment of linear momentum.

B. Torque is the moment of force, and it equals the rate of change of angular momentum, but it is not the moment of linear momentum itself.

C. The moment of linear momentum about a point, L = r cross p, is called angular momentum.

D. Wrong, since angular momentum is correct. NOTE: the second source (mcq-ai) carries this question without "angular momentum" among the options and keys "None of these"; the primary source's version is filed here.

Question 86 Everyday Science

The Poynting vector is most closely associated with:

- A. electrical power alone

intensity of an electromagnetic field ✓ **Correct answer**

- C. energy density alone
- D. None of these

A. The Poynting vector is not electrical power alone; it is a vector quantity describing energy flow.

B. The Poynting vector S = E cross H is the directional energy flux density of an electromagnetic field, and its magnitude is the intensity (power per unit area), so this is the closest of the options offered.

C. Energy density is energy per unit volume, not the Poynting vector, which is energy flow per unit area per unit time.

D. Wrong, since B is the closest option. NOTE: strictly, the Poynting vector is the directional energy flux (power per unit area); "intensity" is its time-averaged magnitude, which is why B is the intended answer.

Question 87 Everyday Science

Young's modulus is a mechanical property associated with:

- A. solids only ✓ **Correct answer**
- B. gases only
- C. liquids only
- D. None of these

A. Young's modulus is the ratio of tensile stress to longitudinal strain, measuring how a material resists being stretched; only solids have a fixed shape and length that can be stretched this way.

B. Gases have no fixed shape and no rigidity, so they possess only a bulk modulus, not a Young's modulus.

C. Liquids have no fixed shape and no rigidity, so they possess only a bulk modulus, not a

D. Wrong, since solids only is correct.

Question 88 Everyday Science

The energy a body possesses because of its motion is called:

- A. kinetic energy ✓ **Correct answer**
- B. potential energy
- C. Both A and B
- D. None of these

A. Kinetic energy is the energy a body has because of its motion, equal to one half of its mass times the square of its velocity.

B. Potential energy is energy stored because of position or configuration, such as height above the ground, not because of motion.

C. Wrong: the energy due to motion itself is kinetic; a moving body may also have potential energy, but that is not the energy of its motion.

D. Wrong, since kinetic energy is correct.

Question 89 Everyday Science

Among alcohol, methane and water, which has the highest specific heat?

- A. Alcohol
- B. Methane
- C. Water ✓ **Correct answer**
- D. None of these

A. Ethyl alcohol has a specific heat of about 2,400 joules per kg per kelvin, lower than water's.

gas has a specific heat of about 2,200 joules per kg per kelvin, lower than water's.

C. Water has a specific heat of about 4,186 joules per kg per kelvin, higher than almost all common substances because of hydrogen bonding between its molecules.

D. Wrong, since Water is correct.

Question 90 Everyday Science

The product of force and velocity is called:

- A. work
- B. power ✓ **Correct answer**
- C. Power and Energy combined
- D. None of these

A. Work is force multiplied by displacement, not by velocity.

B. Power is the rate of doing work: P = W over t, and since work = force times displacement, P = F times v, so the product of force and velocity is power, measured in watts.

C. Energy has the same units as work, and the product of force and velocity is power alone, not power and energy combined.

D. Wrong, since power is correct.

Question 91 Everyday Science

The energy gap (band gap) of gallium arsenide (GaAs) is approximately:

- A. 1.43 eV ✓ **Correct answer**
- B. 2.5 eV
- C. 3.42 eV
- D. None of these

-arsenide is a compound semiconductor with a direct band gap of about 1.42 to 1.43 eV at room temperature, which suits it to LEDs, laser diodes and high-efficiency solar cells.

B. 2.5 eV is far above the GaAs band gap; silicon's is about 1.1 eV and germanium's about 0.66 eV.

C. A value near 3.4 eV is typical of gallium nitride, a wide-gap material used in blue LEDs, not GaAs.

D. Wrong, since 1.43 eV is correct.

Question 92 Everyday Science

Silicon, an elemental semiconductor, is known as a/an:

- A. indirect band gap material ✓ **Correct answer**
- B. direct band gap material
- C. Both A and B
- D. None of these

A. Silicon is an indirect band gap semiconductor (about 1.1 eV): the lowest point of its conduction band and the highest point of its valence band occur at different momentum values, so electrons need a phonon to recombine.

B. Silicon is not a direct band gap material; direct band gap materials such as gallium arsenide are used for LEDs and lasers.

C. Wrong: silicon is indirect only, not both.

D. Wrong, since indirect band gap material is correct.

Question 93 Everyday Science

The abbreviation OLED stands for:

- B. Inorganic LED
- C. Organic Light Emitting Diode ✓ **Correct answer**
- D. None of these

A. "Organic LED" leaves out the word "diode"; the D in OLED stands for diode, not for LED as a whole.

B. OLEDs use organic compounds, not inorganic ones.

C. OLED stands for Organic Light Emitting Diode, a diode in which thin films of organic compounds emit light when current passes through them.

D. Wrong, since Organic Light Emitting Diode is correct.

Question 94 Everyday Science

The luminous efficiency of an electric bulb is measured in:

- A. watts
- B. lux
- C. lumens per watt ✓ **Correct answer**
- D. None of these

A. The watt measures power alone, not luminous efficiency.

B. The lux measures illuminance (lumens falling on each square metre), not luminous efficiency.

C. Luminous efficiency (luminous efficacy) compares the visible light output of a lamp in lumens with the electrical power it consumes in watts, so it is measured in lumens per watt.

D. Wrong, since lumens per watt is correct.

95 Everyday Science

In which country were both the microscope and the telescope first invented?

- A. Italy
- B. England
- C. the Netherlands ✓ **Correct answer**
- D. None of these

A. Italy is the tempting choice because Galileo improved the telescope in 1609, but he did not invent it.

B. England is not where either instrument was first invented.

C. Both instruments were invented in the Netherlands: the compound microscope is credited to the Dutch spectacle-makers Hans and Zacharias Janssen around 1590, and the first telescope patent was sought by Hans Lippershey of Middelburg in 1608.

D. Wrong, since the Netherlands is correct. NOTE: the second source (mcq-ai) carries this question with India in place of the Netherlands and keys "None of these"; the primary source's version is filed here.

Question 96 Everyday Science

Light waves can be polarized mainly because they are:

- A. high-frequency waves
- B. short-wavelength waves
- C. transverse waves ✓ **Correct answer**
- D. None of these

A. Frequency does not decide polarizability: sound waves can have high frequencies and still cannot be polarized.

B. Wavelength does not decide polarizability either.

…on is possible only for transverse waves, in which the vibrations are perpendicular to the direction of travel and can therefore be confined to a single plane; light is a transverse electromagnetic wave, which is why it can be polarized, while sound in air is longitudinal and cannot.

D. Wrong, since transverse waves is correct. NOTE: the second source (mcq-ai) carries this question with "can be reflected" in place of "transverse waves" and keys "None of these"; the primary source's version is filed here.

This paper remains the paper of the Federal Public Service Commission. Ranjha Solutions branding is on this solved presentation only — the paper is not owned by Ranjha Solutions. FPSC publishes no past papers officially.

Past papers are **free** — no charge is taken from any student for papers. General Knowledge answers are as of the 2019 sitting.

Source: https://www.testkaro.net/quiz/motorway_police_patrol_officer_28apr2019_batch1 (accessed 8 Nov 2026). See the source note on this page about the fold-in corrections.