IBA Karachi NTHP Free Practice Set B – 50 Questions

IBA Karachi National Talent Hunt Program · English & Mathematics · with answer key

Please read first

• Set B: 50 original MCQs (27 Mathematics, 23 English) by MCQsAI on the topics in the published NTHP test-preparation outline. Set A and Set B have completely different questions.

• This is not an IBA Karachi paper and does not predict the real test. Check the announcement at nthp.iba.edu.pk.

• Suggested time: 60 minutes. Answer key and short explanations are on the last pages. Scan the QR to take the full timed test online with instant score.

Section	Questions
Mathematics	27
English	23
Total	**50**

MCQsAI is an independent practice platform, not affiliated with IBA Karachi. Questions are original and were not copied from any official document.
Found a mistake? Please tell us: https://mcqsai.com (Contact / Report an error). Full online test with instant score: https://mcqsai.com/mock-tests/iba-karachi-nthp-mock-test-2027-english-mathematics-practice · More: https://mcqsai.com/exams/nthp

Mathematics

Q1. A book costs PKR 500. If there is a 10% discount, what is the discount amount?

A) 25 PKR
B) 50 PKR
C) 30 PKR
D) 40 PKR

Q2. The perimeter of a rectangular park is 240 meters. If its length is 80 meters, what is its width?

A) 20 meters
B) 120 meters
C) 60 meters
D) 40 meters

Q3. The ratio of two numbers is 5:7. If their sum is 144, what is the larger number?

A) 60
B) 84
C) 96
D) 72

Q4. What is 20% expressed as a fraction in its simplest form?

A) 1/6
B) 1/3
C) 1/4
D) 1/5

Q5. What is 3/5 of 25% of 1200 PKR?

A) 180 PKR
B) 240 PKR
C) 300 PKR
D) 360 PKR

Q6. If a worker can complete a task in 12 days, and another worker can complete the same task in 18 days, how many days will it take them to complete the task if they work together?

A) 15 days
B) 7.2 days
C) 30 days
D) 6 days

Q7. A train travels at an average speed of 75 km/h. How far will it travel in 2 hours and 24 minutes?

A) 200 km
B) 225 km
C) 180 km
D) 150 km

Q8. If a tap can fill a water tank in 6 hours, and another tap can fill the same tank in 3 hours, how long will it take to fill the tank if both taps are opened simultaneously?

A) 2 hours
B) 2.5 hours
C) 1.5 hours
D) 3 hours

Q9. A farmer in Punjab cultivates 3/5 of his land with wheat and 1/4 with cotton. What fraction of his land remains uncultivated?

A) 7/20
B) 1/20
C) 3/20
D) 17/20

Q10. A student scored 75 out of 150 in Mathematics, 60 out of 100 in English, and 80 out of 120 in Pakistan Studies. What is his overall percentage score?

A) 58.1%
B) 62.3%
C) 54.1%
D) 68.0%

Q11. If the price of petrol increases by 10% from 100 PKR per liter, and then decreases by 10% from the new price, what is the final price per liter?

A) 99 PKR
B) 110 PKR
C) 80 PKR
D) 100 PKR

Q12. A shop offers a 20% discount on an item priced at 250 PKR. What is the discounted price of the item?

A) 200 PKR
B) 150 PKR
C) 180 PKR
D) 220 PKR

Q13. What is the sum of 1/2 and 3/14?

A) 3/7
B) 6/7
C) 4/7
D) 5/7

Q14. A car travels from Lahore to Islamabad, a distance of approximately 360 km, in 4 hours. What is its average speed?

A) 100 km/h
B) 80 km/h
C) 110 km/h
D) 90 km/h

Q15. Convert the decimal 0.0075 into a fraction in its simplest form.

A) 3/40
B) 1/750
C) 75/10000
D) 3/400

Q16. What is the value of 15 + 6 × (8 - 2) ÷ 3?

A) 30
B) 39
C) 27
D) 21

Q17. A rectangular water tank has a length of 10 cm, a width of 6 cm, and a height of 5 cm. What is its volume?

A) 240 cm^3
B) 300 cm^3
C) 180 cm^3
D) 360 cm^3

Q18. An investor bought shares of a Pakistani company for PKR 50,000. After one year, the value of the shares increased by 15%. What is the new value of the shares?

A) PKR 60,000
B) PKR 62,500
C) PKR 57,500
D) PKR 55,500

Q19. A container is 3/4 full. If 15 liters are removed, it is 1/2 full. What is the total capacity of the container in liters?

A) 60 liters
B) 45 liters
C) 90 liters
D) 30 liters

Q20. An FIA officer is analyzing a series of coded messages. The numerical sequence in one message is 2, 5, 10, 17, 26, ... What is the 7th term in this sequence?

A) 37
B) 41
C) 53
D) 50

Q21. What is 5/4 expressed as a decimal?

A) 1.25
B) 1.5
C) 1.75
D) 2.0

Q22. If the price of petrol increases by 25%, by what percentage must its consumption be reduced so as not to increase the expenditure?

A) 30%
B) 33.33%
C) 25%
D) 20%

Q23. A bus travelling from Rawalpindi to Multan covers the first 120 km at an average speed of 60 km/h and the remaining 180 km at an average speed of 45 km/h. What is the average speed of the bus for the entire journey?

A) 55 km/h
B) 48 km/h
C) 50 km/h
D) 52 km/h

Q24. What is the average of the first five prime numbers found in a list of numbers from 1 to 20?

A) 5.4
B) 5.8
C) 5.6
D) 6.2

Q25. A train 150 meters long is running at a speed of 54 km/h. How long will it take to cross a pole?

A) 10 seconds
B) 15 seconds
C) 5 seconds
D) 20 seconds

Q26. Simplify: 250 × 4 + 700 - (150 ÷ 3)

A) 1750
B) 1650
C) 1700
D) 1550

Q27. The ratio of students to teachers in a school in Islamabad is 25:1. If there are 1,250 students, how many teachers are there?

A) 50
B) 40
C) 60
D) 75

English

Q28. The project was approved, but there's a catch. What does 'a catch' mean in this context?

A) An opportunity
B) A hidden problem or difficulty
C) A successful outcome
D) A fish

Q29. Which legal term refers to a formal written order requiring a person to appear in court?

A) Warrant
B) Writ
C) Subpoena
D) Injunction

Q30. Transform the direct speech into indirect speech: He said, 'Where is the police station?'

A) He inquired that where was the police station.
B) He inquired where is the police station.
C) He inquired where was the police station.
D) He inquired where the police station was.

Q31. Which of the following sentences is grammatically correct?

A) Neither the minister nor his aides is present at the meeting in Islamabad.
B) Neither the minister nor his aides were present at the meeting in Islamabad.
C) Neither the minister nor his aides has present at the meeting in Islamabad.
D) Neither the minister nor his aides was present at the meeting in Islamabad.

Q32. Choose the correct indirect speech conversion of: 'He said to me, "Have you completed the annual FBR tax return?"'

A) He inquired to me if I had completed the annual FBR tax return.
B) He inquired from me if I had completed the annual FBR tax return.
C) He inquired me if I had completed the annual FBR tax return.
D) He inquired of me if I had completed the annual FBR tax return.

Q33. The Election Commission of Pakistan has decreed: _____ for the upcoming general elections. Which option correctly uses the subjunctive mood?

A) It is mandatory that every citizen will register
B) It is mandatory that every citizen register
C) It is mandatory that every citizen registers
D) It is mandatory that every citizen registered

Q34. Choose the word closest in meaning to 'Ephemeral'.

A) Eternal
B) Transient
C) Lasting
D) Permanent

Q35. Which sentence uses the legal term 'warrant' correctly?

A) The judge issued a warrant of his arresting.
B) The judge issued a warrant to his arrest.
C) The judge issued a warrant for his arrest.
D) The judge warranted his arrest for him.

Q36. The committee acts as one body. Choose the sentence with correct subject-verb agreement.

A) The committee have decided on a new course of action.
B) The committee has decide on a new course of action.
C) The committee has decided on a new course of action.
D) The committee were deciding on a new course of action.

Q37. Choose the correct active voice for the sentence: 'He was advised by the doctor to take rest.'

A) Rest was advised to him by the doctor.
B) He was advised by the doctor to take rest.
C) To take rest was advised by the doctor to him.
D) The doctor advised him to take rest.

Q38. Pakistani citizens must _____ the laws and regulations of the country.

A) abide by
B) abide for
C) abide to
D) abide with

Q39. Mohsin said, 'I visited the Badshahi Mosque last year.' (Convert to Indirect Speech)

A) Mohsin said that he has visited the Badshahi Mosque the previous year.
B) Mohsin said that he had visited the Badshahi Mosque the previous year.
C) Mohsin said that he would visit the Badshahi Mosque the previous year.
D) Mohsin said that he visited the Badshahi Mosque last year.

Q40. Identify the sentence with the correct usage of the prepositional phrase.

A) Despite for his consistent efforts, he failed to clear the SPSC examination.
B) Despite of his consistent efforts, he failed to clear the SPSC examination.
C) In spite his consistent efforts, he failed to clear the SPSC examination.
D) Despite his consistent efforts, he failed to clear the SPSC examination.

Q41. Which sentence demonstrates correct subject-verb agreement with a correlative conjunction and maintains semantic dependency in an official context?

A) Neither the provincial government nor the federal authorities is willing to take full responsibility for the development project's delays.
B) Neither the provincial government nor the federal authorities was willing to take full responsibility for the development project's delays.
C) Neither the provincial government nor the federal authorities were willing to take full responsibility for the development project's delays.
D) Neither the provincial government nor the federal authorities are willing to take full responsibility for the development project's delays.

Q42. Choose the correct preposition: The meeting was scheduled ____ 10 AM.

A) at
B) to
C) on
D) in

Q43. Fill in the blank with the appropriate preposition: The Pakistani team is confident ____ winning the upcoming cricket series.

A) at
B) to
C) on
D) of

Q44. The FIA's efforts aim to _____ crucial information from cybercriminals.

A) hinder
B) elicit
C) suppress
D) prevent

Q45. The inspection team _____ the contractor for the shoddy construction work on the NHA project.

A) took to task
B) took to heart
C) took a backseat
D) took for granted

Q46. Choose the correct passive voice sentence for: 'The recent floods have caused extensive damage across Sindh.'

A) Extensive damage is caused across Sindh by the recent floods.
B) The recent floods have caused extensive damage across Sindh.
C) Extensive damage has been caused across Sindh by the recent floods.
D) Extensive damage have been caused across Sindh by the recent floods.

Q47. Which of the following sentences is grammatically correct and coherent?

A) Having finished the report, the supervisor reviewed it.
B) Having finished the report, it was reviewed by the supervisor.
C) The report having finished, the supervisor reviewed it.
D) After finishing the report, it was reviewed by the supervisor.

Q48. Convert the following direct speech into indirect speech: 'The judge said to the lawyer, "Speak the truth."'

A) The judge ordered the lawyer to speak the truth.
B) The judge asked the lawyer to speak the truth.
C) The judge ordered the lawyer that he should speak the truth.
D) The judge said the lawyer to speak the truth.

Q49. Choose the correct verb form: 'The construction workers _____ the new section of the Motorway M-8 for the past six months.'

A) are building
B) have been building
C) has been building
D) is building

Q50. The meeting will be held _____ 10 AM.

A) in
B) on
C) at
D) with

Answer Key

Q1: B	Q2: D	Q3: B	Q4: D	Q5: A	Q6: B	Q7: C	Q8: A	Q9: C	Q10: A
Q11: A	Q12: A	Q13: D	Q14: D	Q15: D	Q16: C	Q17: B	Q18: C	Q19: A	Q20: D
Q21: A	Q22: D	Q23: C	Q24: C	Q25: A	Q26: B	Q27: A	Q28: B	Q29: C	Q30: D
Q31: B	Q32: D	Q33: B	Q34: B	Q35: C	Q36: C	Q37: D	Q38: A	Q39: B	Q40: D
Q41: C	Q42: A	Q43: D	Q44: B	Q45: A	Q46: C	Q47: A	Q48: A	Q49: B	Q50: C

Next step

1) **Take the full online practice test** for an instant score (scan the QR on page 1).
2) **Join the MCQsAI WhatsApp channel** for daily MCQs, answer keys and updates.
3) **Share this practice set with a friend on WhatsApp**.

Explanations

Q1 · B · Percentages · easy
Discount = 10% of 500 = (10/100) x 500 = PKR 50.

Q2 · D · Basic Geometry (Perimeter) · medium
Perimeter = 2 \u00d7 (Length + Width). 240 = 2 \u00d7 (80 + Width). 120 = 80 + Width. Width = 120 - 80 = 40 meters.

Q3 · B · Ratios and Proportions · medium
Let the numbers be 5x and 7x. Their sum is 5x + 7x = 12x. Given sum = 144, so 12x = 144, which means x = 12. The larger number is 7x = 7 × 12 = 84.

Q4 · D · Fractions and Decimals · easy
20% means 20 out of 100, which can be written as 20/100. Simplifying this fraction by dividing both numerator and denominator by 20 gives 1/5.

Q5 · A · Fractions, Decimals, and Percentages · medium
First, find 25% of 1200 PKR: 0.25 \times 1200 = 300 PKR. Then, find 3/5 of 300 PKR: (3/5) \times 300 = 3 \times 60 = 180 PKR.

Q6 · B · Word Problems (Age, Distance, Time, Work) · hard
Worker 1's daily rate = 1/12 of the task. Worker 2's daily rate = 1/18 of the task. Combined daily rate = 1/12 + 1/18 = 3/36 + 2/36 = 5/36. So, together they will take 36/5 = 7.2 days.

Q7 · C · Time, Speed, and Distance Problems · hard
Convert 2 hours and 24 minutes to hours: 24 minutes = 24/60 hours = 2/5 hours = 0.4 hours. Total time = 2 + 0.4 = 2.4 hours. Distance = Speed × Time = 75 km/h × 2.4 hours = 180 km.

Q8 · A · Time and Work Problems · hard
In one hour, the first tap fills 1/6 of the tank. In one hour, the second tap fills 1/3 of the tank. Together, in one hour, they fill (1/6) + (1/3) = (1/6) + (2/6) = 3/6 = 1/2 of the tank. So, to fill the entire tank (1 whole), it will take 1 / (1/2) = 2 hours.

Q9 · C · Fractions · medium
Fraction of land cultivated = 3/5 + 1/4 = (12/20) + (5/20) = 17/20. Fraction of land uncultivated = Total land - Cultivated land = 1 - 17/20 = 3/20.

Q10 · A · Percentages · medium
Total obtained = 75 + 60 + 80 = 215. Total marks = 150 + 100 + 120 = 370. 215 / 370 x 100 = 58.1% (approx).

Q11 · A · Percentages · hard
After a 10% rise: 100 + 10 = 110. After a 10% fall: 110 - 11 = 99 PKR.

Q12 · A · Percentages · medium
Discount amount = 20% of 250 PKR = 0.20 * 250 = 50 PKR. Discounted price = Original price - Discount amount = 250 - 50 = 200 PKR.

Q13 · D · Fractions and Ratios · easy
To add fractions, find a common denominator. The least common multiple of 2 and 14 is 14. Convert 1/2 to 7/14. Then, add 7/14 + 3/14 = 10/14. Simplify the fraction by dividing both numerator and denominator by 2: 10/14 = 5/7.

Q14 · D · Time, Speed, and Distance · easy
Speed = Distance / Time. So, 360 km / 4 hours = 90 km/h.

Q15 · D · Fractions and Decimals · medium
0.0075 = 75/10000. Divide both by 25: 75 ÷ 25 = 3, and 10000 ÷ 25 = 400. So, 3/400.

Q16 · C · Arithmetic (BODMAS) · easy
Using BODMAS: 15 + 6 × (6) ÷ 3 = 15 + 36 ÷ 3 = 15 + 12 = 27.

Q17 · B · Basic Geometry (Volume) · medium
Volume of a rectangular tank = length \times width \times height = 10 cm \times 6 cm \times 5 cm = 300 cm^3.

Q18 · C · Advanced Arithmetic · easy
Increase amount = 15% of PKR 50,000 = (15/100) * 50,000 = 15 * 500 = PKR 7,500. New value = Original value + Increase amount = 50,000 + 7,500 = PKR 57,500.

Q19 · A · Fractions, Decimals, and Percentages · hard
The difference in fullness is 3/4 - 1/2 = 3/4 - 2/4 = 1/4. This 1/4 capacity corresponds to 15 liters. So, the total capacity (4/4) is 4 \u00d7 15 = 60 liters.

Q20 · D · Mathematical Logic and Sequences · easy
The pattern is n^2 + 1. For the 1st term, 1^2 + 1 = 2. For the 2nd term, 2^2 + 1 = 5. For the 6th term, 6^2 + 1 = 37. So the 7th term is 7^2 + 1 = 49 + 1 = 50.

Q21 · A · Fractions and Decimals · easy
To convert a fraction to a decimal, divide the numerator by the denominator. 5 ÷ 4 = 1.25.

Q22 · D · Fractions, Decimals, and Percentages · hard
Let original price be P and original consumption be C. Original expenditure = P*C. New price = P * (1 + 0.25) = 1.25P. Let new consumption be C'. For expenditure to remain same: P*C = 1.25P * C'. C = 1.25 C'. C' = C / 1.25 = 0.8C. Reduction in consumption = C - 0.8C = 0.2C. Percentage reduction = (0.2C / C) * 100% = 20%.

Q23 · C · Basic Mathematics, Arithmetic · medium
Time taken for the first part = Distance/Speed = 120 km / 60 km/h = 2 hours. Time taken for the second part = Distance/Speed = 180 km / 45 km/h = 4 hours. Total distance = 120 + 180 = 300 km. Total time = 2 + 4 = 6 hours. Average speed = Total Distance / Total Time = 300 km / 6 hours = 50 km/h.

Q24 · C · Averages · medium
The first five prime numbers are 2, 3, 5, 7, 11. Their sum is 2 + 3 + 5 + 7 + 11 = 28. Average = Sum / Count = 28 / 5 = 5.6.

Q25 · A · Time, Speed, and Distance Problems · hard
Convert speed to m/s: 54 km/h = 54 × (5/18) m/s = 3 × 5 = 15 m/s. To cross a pole, the train needs to cover its own length. Time = Distance / Speed = 150 m / 15 m/s = 10 seconds.

Q26 · B · Basic Arithmetic Operations (BODMAS) · easy
250 x 4 = 1000 and 150 / 3 = 50. Then 1000 + 700 - 50 = 1650.

Q27 · A · Ratios and Proportions · medium
Let the number of students be S and teachers be T. S/T = 25/1. Given S = 1,250. So, 1,250/T = 25/1. T = 1,250 / 25 = 50 teachers.

Q28 · B · Idioms and Phrases · easy
In this idiomatic expression, 'a catch' refers to a hidden difficulty or disadvantage.

Q29 · C · Legal and Official Vocabulary · medium
A 'subpoena' is a writ issued by a government agency, most often a court, to compel testimony by a witness or production of evidence under a penalty for failure.

Q30 · D · Direct and Indirect Speech · medium
When converting interrogative sentences to indirect speech, the reporting verb changes to 'asked/inquired', and the sentence structure becomes assertive (subject + verb), with the question mark removed. The tense generally shifts backward.

Q31 · B · Advanced Grammar and Syntax · medium
When 'neither...nor' connects two subjects, the verb agrees with the subject closest to it. 'Aides' is plural, so the verb 'were' (plural past tense of 'to be') is correct.

Q32 · D · Direct & Indirect Speech · medium
When converting an interrogative sentence in direct speech to indirect speech, 'said to' is replaced by 'inquired of' or 'asked', and 'if' or 'whether' is used to introduce the reported question. The tense is also shifted backward.

Q33 · B · Complex Subjunctive and Conditional Syntax · hard
After 'it is mandatory that', the subjunctive uses the base form of the verb for every subject: 'every citizen register'.

Q34 · B · Vocabulary · medium
'Ephemeral' means lasting for a very short time. 'Transient' shares this meaning.

Q35 · C · Legal and Official Vocabulary · medium
The correct phrase is 'a warrant for someone's arrest'. The other options use the wrong preposition or word form.

Q36 · C · Grammar (Subject-Verb Agreement) · hard
A collective noun acting as one unit takes a singular verb: 'The committee has decided'. D uses the wrong verb form.

Q37 · D · Active and Passive Voice · easy
To convert from passive to active voice, identify the agent (doctor) and make it the subject, and the original subject (he) becomes the object.

Q38 · A · Prepositions and Phrasal Verbs · easy
'Abide by' means to comply with or follow a rule, decision, or instruction.

Q39 · B · Direct/Indirect Speech · hard
When converting to indirect speech, the simple past tense ('visited') changes to past perfect ('had visited'), and 'last year' changes to 'the previous year'.

Q40 · D · Prepositions and Phrasal Verbs · easy
'Despite' does not take 'of'. The correct usage is simply 'despite his efforts' or 'in spite of his efforts'.

Q41 · C · Structural and Semantic Dependencies · easy
With 'neither... nor', the verb agrees with the noun or pronoun closest to it. In this case, 'federal authorities' is plural, so the plural verb 'were' is correct. This ensures structural and semantic dependency.

Q42 · A · Grammar (Prepositions) · easy
The preposition 'at' is used to specify a precise time.

Q43 · D · Prepositions · easy
'Confident of' is used before a result one expects: 'confident of winning'.

Q44 · B · Fill in the blanks (Contextual Vocabulary) · hard
'Elicit' means to draw out (a response, answer, or fact) from someone in reaction to one's own actions or questions. This fits the context of obtaining information.

Q45 · A · Idioms and Phrases · medium
'Took to task' means to reprimand or criticize someone severely for their actions.

Q46 · C · Active and Passive Voice · hard
The subject in the passive voice is 'extensive damage' which is singular, so it takes 'has been caused'.

Q47 · A · Grammar Usage and Sentence Structuring · hard
In A, 'Having finished the report' correctly refers to the subject 'the supervisor', who finished it. In B, C and D the opening phrase does not refer to the person who did the action.

Q48 · A · Active/Passive Voice and Direct/Indirect Narration · medium
An order in direct speech becomes 'ordered + object + to-infinitive': 'The judge ordered the lawyer to speak the truth.' 'Said' cannot take 'the lawyer' as an object.

Q49 · B · Tenses and Verb Forms · medium
The phrase 'for the past six months' indicates an action that started in the past and is continuing in the present, requiring the present perfect continuous tense. Since 'construction workers' is plural, 'have been building' is the correct form.

Q50 · C · Simple Prepositions · easy
The preposition 'at' is used for specific times.

mcqsai.com