Assistant Executive Engineer, NADRA — 2023 · Solved Past Paper

Body: Open Testing Service (OTS) · **Post:** Assistant Executive Engineer, NADRA · **Year:** 2023 · **Questions:** 19 in the original paper — **19 solved and verified**, none excluded · **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 2023 sitting.

Source note: TestPointPK solved past paper: NADRA ASSISTANT EXECUTIVE ENGINEER PAST PAPER HELD ON 06-08-2023 (2 paginated pages carry questions, 10 + 9; page 3 serves no questions). Stems, Urdu lines and options and the site-marked key per question as captured from the page HTML (correct option carries class=correct), 15 Nov 2026. The source states no printed total anywhere on the page; filed as the complete paper as presented (19 questions, 19 solved). 0 site-key corrections, 1 PICK-ONE (Q16, extravagance synonym — Generosity/Luxury/Excess also synonyms, bank files Waste), 0 DEFECTIVE-excluded. Option correction Q18 B 'Water conversation' -> 'Water conservation' (misprint). Best-fit disclosed (site key kept): Q5 D foundation shape/size (overturning stability), Q12 B powerhouse inlet/outlet (head; gross-head definition closest to D). Sitting-date check: Q2 C Lula da Silva (took office 1 Jan 2023). 17 questions carry a Urdu line; 0 have a Urdu stem; 2 have five options as printed (Q16, Q18). Dedup 15 Nov 2026: CLEAN — live index 929 papers: no ots-nadra-assistant-executive-engineer-2023-08-06 paper_id in the index; exact + first-8-words + format-tolerant fuzzy vs the live index: at most 1 stem shared with any one live paper, fuzzy >=0.90 only 1/19. Letter 37bgy verified free at build time (no 37bgy in configs, artifact dirs, knowledge directory, batch records or the live index).

1 Islamic Studies

نبی ?When did the Holy Prophet (SAW) performed Hajjatul-Wada (Farewell (Last) Sermon)

پاک صلی اللہ علیہ وسلم نے حجۃ الوداع کب ادا کیا؟

- A. 10 AH (632 AD) ✓ **Correct answer**
- B. 9 AH (631 AD)
- C. 8 AH (630 AD)
- D. None of these

A. Correct: the Farewell Pilgrimage (Hajjatul-Wada) was performed in 10 AH (632 AD).

B. Wrong: it was in 10 AH, not 9 AH.

C. Wrong: it was in 10 AH, not 8 AH.

D. Wrong: option A is correct.

Question 2 General Knowledge

برازیل کا موجودہ صدر کون ہے؟ ?Who is the Current President of Brazil

- A. Michel Temer
- B. Jair Bolsonaro
- C. Lula da Silva ✓ **Correct answer**
- D. None of these

A. Wrong: Temer was President of Brazil from 2016 to 2018.

B. Wrong: Bolsonaro's term ended on 31 December 2022.

C. Correct: Lula da Silva took office as President of Brazil on 1 January 2023, before the 6 August 2023 sitting.

D. Wrong: option C is correct.

3 Civil Engineering

Which hydraulic structure is designed to raise or lower boats between water levels in a canal or river? کون سا ہائیڈرولک ڈھانچہ کسی نہر یا دریا میں پانی کی سطح کے درمیان کشتیوں کو اونچا یا کم کرنے کے لیے ڈیزائن کیا گیا ہے؟

- A. Lock ✓ **Correct answer**
- B. Weir
- C. Dam
- D. Spillway

A. Correct: a lock raises or lowers boats between water levels in a canal or river.

B. Wrong: a weir controls water flow and level; it does not carry boats between levels.

C. Wrong: a dam stores water; it does not move boats between levels.

D. Wrong: a spillway releases excess water from a dam.

Question 4 Civil Engineering

The process of removing salts and other impurities from seawater to make it suitable for drinking and irrigation is called? سمندری پانی سے نمکیات اور دیگر نجاستوں کو نکال کر پینے اور آبپاشی کے لیے موزوں بنانے کے عمل کو کہتے ہیں؟

- A. Water purification
- B. Water recycling
- C. Water harvesting
- D. Water Desalination ✓ **Correct answer**

A. Wrong: purification cleans water; desalination specifically removes salts from seawater.

B. Wrong: recycling reuses treated wastewater.

C. Wrong: harvesting collects rainwater.

esalination removes salts and other impurities from seawater to make it suitable for drinking and irrigation.

Question 5 Civil Engineering

The stability of a structure against overturning is primarily influenced by the: الٹنے کے خلاف

ڈھانچے کا استحکام بنیادی طور پر کس چیز سے متاثر ہوتا ہے؟

- A. Material properties of the structure
- B. Quality of construction materials
- C. Architectural design of the structure
- D. Shape and size of the foundation ✓ **Correct answer**

A. Wrong: the bank files the foundation's shape and size.

B. Wrong: the bank files the foundation's shape and size.

C. Wrong: the bank files the foundation's shape and size.

D. Correct as filed: stability against overturning is primarily governed by the base and foundation geometry (see Verification Summary).

Question 6 Civil Engineering

Which admixture is commonly used in hot weather to extend the setting time of concrete? کنکریٹ کی ترتیب کے وقت کو بڑھانے کے لیے گرم موسم میں عام طور پر کون سا مرکب استعمال ہوتا ہے؟

- A. Air-entraining admixture
- B. Retarding admixture ✓ **Correct answer**
- C. Accelerating admixture
- D. Water-reducing admixture

A. Wrong: an air-entraining admixture improves freeze-thaw resistance.

B. Correct: a retarding admixture extends the setting time of concrete in hot weather.

accelerating admixture shortens the setting time.

D. Wrong: a water-reducing admixture lowers the water content of the mix.

Question 7 Civil Engineering

Which structural analysis method is widely used for complex and irregularly shaped structures? پیچیدہ اور فاسد شکل والے ڈھانچے کے لیے کون سا ساختی تجزیہ کا طریقہ وسیع پیمانے پر استعمال ہوتا ہے؟

- A. Matrix method
- B. Finite element method ✓ **Correct answer**
- C. Moment distribution method
- D. Slope-defection method

A. Wrong: the matrix method is a general frame-analysis tool, not the standard for complex irregular shapes.

B. Correct: the finite element method is widely used for complex and irregularly shaped structures.

C. Wrong: moment distribution suits regular frames.

D. Wrong: the slope-deflection method suits regular frames (the option is printed 'Slope-defection method' as filed).

Question 8 Civil Engineering

The process of reusing treated wastewater for non-potable purposes like irrigation and industrial processes in known as: علاج شدہ گندے پانی کو غیر پینے کے قابل مقاصد جیسے آبپاشی اور صنعتی عمل کے لیے دوبارہ استعمال کرنے کے عمل کو کیا کہا جاتا ہے؟

- A. Water conservation
- B. Water purification

- er desalination
- D. Water recycling ✓ **Correct answer**

A. Wrong: conservation saves water; the reuse of treated wastewater is recycling.

B. Wrong: purification treats water; reuse is recycling.

C. Wrong: desalination removes salt from seawater.

D. Correct: reusing treated wastewater for non-potable purposes such as irrigation and industrial processes is water recycling.

Question 9 Civil Engineering

?What is he recommended method to prevent plastic shrinkage cracking in concrete

کنکریٹ میں پلاسٹک کے سکڑنے کو روکنے کا تجویز کردہ طریقہ کیا ہے؟

- A. Using larger aggregate particles
- B. Increasing the cement content
- C. adding more water to the mix
- D. placing a wet burlap or using a fog spray during curing ✓ **Correct answer**

A. Wrong: larger aggregate does not prevent plastic shrinkage cracking.

B. Wrong: more cement increases shrinkage.

C. Wrong: more water increases shrinkage and cracking.

D. Correct: keeping the surface moist with wet burlap or a fog spray during curing prevents plastic shrinkage cracking.

Question 10 Civil Engineering

The process of replenishing groundwater by allowing water to percolate through the soil

زمین کے ذریعے پانی کو ٹکرانے کی اجازت دے کر زمینی پانی کو بھرنے کے عمل کو کیا کہا جاتا ہے؟ :is known as

- B. Aquifer depletion
- C. Groundwater recharge ✓ **Correct answer**
- D. Water privations

A. Wrong: desalination removes salt from seawater.

B. Wrong: depletion is the loss of groundwater, the opposite of replenishing it.

C. Correct: replenishing groundwater by allowing water to percolate through the soil is groundwater recharge.

D. Wrong: this is not the term for the process (and is garbled as printed).

Question 11 Civil Engineering

What is the term for the process of extracting heat from water bodies to provide cooling for industrial facilities or air conditioning? صنعتی سہولیات یا ایئر کنڈیشنگ کے لیے ٹھنڈک فراہم کرنے کے لیے آبی ذخائر سے حرارت نکالنے کے عمل کی اصطلاح کیا ہے؟

- A. Water desalination
- B. Water heating
- C. Water source cooling ✓ **Correct answer**
- D. Water recycling

A. Wrong: desalination removes salt from seawater.

B. Wrong: heating adds heat; this process extracts heat to provide cooling.

C. Correct: extracting heat from water bodies to provide cooling for industrial facilities or air conditioning is water source cooling.

D. Wrong: recycling reuses wastewater.

12 Civil Engineering

The head of water available for hydropower generation is calculated as the difference in water levels between the: ہائیڈرو پاور جنریشن کے لیے دستیاب پانی کے سربراہ کا حساب پانی کی سطح میں فرق کے طور پر کیا جاتا ہے:

- A. Water source and the dam
- B. Inlet and outlet of the powerhouse ✓ **Correct answer**
- C. Dam and penstock
- D. Reservoir and turbine

A. Wrong: the bank files the powerhouse inlet and outlet.

B. Correct as filed: the head available for hydropower generation is the difference in water levels between the inlet and outlet of the powerhouse (see Verification Summary).

C. Wrong: the bank files the powerhouse inlet and outlet.

D. Wrong: the bank files the powerhouse inlet and outlet.

Question 13 Civil Engineering

In Structural design, the ratio of the applied load to the cross-sectional area of the structural member is known as: ساختی ڈیزائن میں، ساختی ممبر کے کراس سیکشنل ایریا پر لاگو بوجھ کے تناسب کو کیا کہا جاتا ہے

- A. Strain
- B. Stress ✓ **Correct answer**
- C. Deflection
- D. Modulus of elasticity

A. Wrong: strain is deformation per unit length.

B. Correct: the applied load divided by the cross-sectional area of a member is stress.

eflection is the displacement of a member.

D. Wrong: the modulus is stress divided by strain.

Question 14 Civil Engineering

The point in a structure where the entire weight of the structure can be considered to act vertically downward is called the: ڈھانچے کا وہ نقطہ جہاں ڈھانچے کے پورے وزن کو عمودی طور پر نیچے کی طرف کام کرنے کے لیے سمجھا جا سکتا ہے کہلاتا ہے

- A. Point of equilibrium
- B. Center of mass
- C. Point of application
- D. Center of gravity ✓ **Correct answer**

A. Wrong: equilibrium is a state of balance, not the point where weight acts.

B. Wrong: the centre of mass is the mass-weighted point; the weight is considered to act at the centre of gravity.

C. Wrong: this is where a force is applied.

D. Correct: the entire weight of a structure is considered to act vertically downward at its centre of gravity.

Question 15 English

The antonym of ‘thrifty’ is?

- A. Prudent
- B. Frugal
- C. Extravagant ✓ **Correct answer**
- D. All of these

A. Wrong: prudent is a synonym of thrifty.

ugal is a synonym of thrifty.

C. Correct: the antonym of thrifty (careful with money) is extravagant (spending freely).

D. Wrong: option C is correct.

Question 16 English

The synonym of ‘EXTRAVAGANCE’ is?

- A. Generosity
- B. Waste ✓ **Correct answer**
- C. Luxury
- D. Excess
- E. All of these

A. Wrong as the filed answer: generosity is a synonym of extravagance, but the bank files B (see Verification Summary).

B. Correct as filed (PICK-ONE): waste (wasteful spending) is the bank's filed synonym of extravagance.

C. Wrong as the filed answer: luxury is also a synonym, but the bank files B.

D. Wrong as the filed answer: excess is also a synonym, but the bank files B.

E. Wrong: the bank files B alone.

Question 17 General Knowledge

The Sustainable Goals (SDGs) aim to ensure the availability and sustainable management

اقوام متحدہ کے پائیدار اہداف کا مقصد کس سال تک سب کے لیے دستیابی اور پائیدار ?and sanitation for all by

انتظام اور صفائی کو یقینی بنانا ہے؟

- A. 2025

- C. 2020
- D. 2030 ✓ **Correct answer**

A. Wrong: the SDG target year is 2030.

B. Wrong: the target year is 2030.

C. Wrong: the target year is 2030.

D. Correct: the Sustainable Development Goals aim to ensure the availability and sustainable management of water and sanitation for all by 2030.

Question 18 Civil Engineering

The process of preventing the degradation of water quality and the preservation of water resources for future generation is known as? پانی کے معیار کو گرنے سے روکنے اور آنے والی نسلوں کے لیے آبی وسائل کے تحفظ کے عمل کو کیا کہا جاتا ہے؟

- A. Water pollution
- B. Water conservation ✓ **Correct answer**
- C. Water sustainability
- D. Water privatization
- E. All of these

A. Wrong: pollution degrades water quality; it does not preserve it.

B. Correct: preventing the degradation of water quality and preserving water resources for future generations is water conservation (option B is printed 'Water conversation', a misprint corrected here — see Verification Summary).

C. Wrong: the bank files conservation.

D. Wrong: privatization is the transfer of water services to private hands.

Note: Filed option B read "Water conversation" (misprint in the source reproduction); corrected to "Water conservation" as documented in the reviewed file.

Question 19 Civil Engineering

معیاری کنکریٹ کو ?What is the typical period for standard concrete to attain its full strength

اپنی پوری طاقت حاصل کرنے کے لیے مخصوص مدت کیا ہے؟

- A. 90 Days
- B. 7 Days
- C. 28 Days ✓ **Correct answer**
- D. 1 Day

A. Wrong: concrete attains its full strength in 28 days, not 90.

B. Wrong: 7 days gives about two-thirds strength, not full strength.

C. Correct: standard concrete attains its full strength in 28 days.

D. Wrong: the period is 28 days.

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