```
<DOCTYPE html!>

<"html lang="en>

<head>

</ "meta charset="UTF-8>

<title>Engineering & Materials – MCQ Exam</title>

<style>

} body

;font-family: 'Segoe UI', Arial, sans-serif

;background: #eef1f7

;margin: 0

;padding: 0

;direction: ltr

{


} header.

;(background: linear-gradient(135deg, #1e3c72, #2a5298

;color: white

;padding: 30px 20px

;text-align: center

;(box-shadow: 0 2px 8px rgba(0,0,0,0.2

{

} header h1.

;margin: 0

;font-size: 32px

;font-weight: bold

{

} header p.
```

;margin: 8px 0 0

;font-size: 18px

;opacity: 0.9

{

} quiz-container.

;max-width: 950px

;margin: 25px auto

;background: #ffffff

;padding: 20px 25px

;border-radius: 10px

;(box-shadow: 0 2px 8px rgba(0,0,0,0.1

{

} question.

;margin-bottom: 18px

;padding: 15px

;border-radius: 8px

;background: #f9fafc

;border: 1px solid #dfe3ee

;transition: all 0.3s ease

{

} question-title.

;font-weight: bold

;margin-bottom: 12px

;color: #222

;line-height: 1.4

{

```css
.options label {
  display: block;
  margin-bottom: 8px;
  cursor: pointer;
  padding: 10px;
  border-radius: 6px;
  transition: background 0.2s;
}

.options label:hover {
  background: #f0f2f5;
}

.options input {
  margin-right: 12px;
  transform: scale(1.1);
}

/* حالات الإجابة */
.feedback {
  margin-top: 10px;
  font-weight: bold;
  padding: 8px;
  border-radius: 5px;
  display: none;
}
.feedback.correct { color: #2e7d32; background: #e8f5e9; display: block; }
.feedback.incorrect { color: #c62828; background: #ffebee; display: block; }
.question.correct-border { border-left: 6px solid #4caf50; background: #f1f9f1; }
```

```
.question.incorrect-border { border-left: 6px solid #f44336; background: #fff5f5; }

/* ===== زر النتيجة المطور ===== */
.result-section {
text-align: center;
padding-bottom: 50px;
}
#scoreBtn {
background: linear-gradient(135deg, #1e3c72, #2a5298);
color: white;
border: none;
padding: 16px 40px;
font-size: 20px;
font-weight: bold;
border-radius: 50px;
cursor: pointer;
box-shadow: 0 4px 15px rgba(30, 60, 114, 0.3);
transition: all 0.3s ease;
}
#scoreBtn:hover {
transform: translateY(-3px);
box-shadow: 0 8px 25px rgba(30, 60, 114, 0.4);
}
#resultBox {
margin: 25px auto;
max-width: 600px;
padding: 30px;
```

```
;border-radius: 15px
;background: #fff
;display: none
;border: 3px solid #1e3c72
;animation: fadeIn 0.5s ease
{
} keyframes fadeIn@
{ ;(from { opacity: 0; transform: translateY(10px
{ ;(to { opacity: 1; transform: translateY(0
{
<style/>
<head/>
<body>

<"div class="header>
<h1>Engineering & Materials – Automated MCQ Exam</h1>
<p>80 Questions • Final Performance Evaluation</p>
<div/>


<div class="quiz-container" id="quiz"></div>


<"div class="result-section>
<button id="scoreBtn">Show My Final Score</button>
<div id="resultBox"></div>
<div/>


<script>
```

] = const questionsData

/* ENGINEERING */

,"text: "Engineering is mainly:", options: ["theoretical", "practical", "medical }
,{ "historical"], correctText: "practical"

,"text: "Civil engineering deals with:", options: ["bridges and roads", "computers }
,{ "medicine", "cars only"], correctText: "bridges and roads"

text: "Mechanical engineering deals with:", options: ["electricity", "design of }
,{ "machines", "medicine", "chemistry"], correctText: "design of machines

,"text: "Electrical engineering is about:", options: ["roads", "electricity generation }
,{ "cars", "medicine"], correctText: "electricity generation"

,"text: "Electronic engineering develops:", options: ["bridges", "food }
,{ "communication equipment", "medicine"], correctText: "communication equipment"

,"text: "Automobile engineering belongs to:", options: ["civil", "mechanical }
,{ "electrical", "medical"], correctText: "mechanical"

,"text: "Marine engineering belongs to:", options: ["civil", "mechanical", "electrical }
,{ "medical"], correctText: "mechanical"

& text: "Medical engineering belongs partly to:", options: ["civil", "mechanical }
,{ "electrical", "electronic only", "none"], correctText: "mechanical & electrical

,"text: "Heating and ventilating belong to:", options: ["civil", "electronic }
,{ "mechanical", "medical"], correctText: "mechanical"

,["text: "Lighting belongs to:", options: ["electrical", "civil", "mechanical", "medical }
,{ "correctText: "electrical

,"text: "Which engineers work with power stations?", options: ["civil", "electrical }
,{ "marine", "automobile"], correctText: "electrical"

text: "Which engineers work with cables and switchgear?", options: ["electrical }
,{ "installation", "marine", "medical", "civil"], correctText: "electrical installation

,"text: "Which engineers work with planes?", options: ["marine", "aeronautical }
,{ "civil", "medical"], correctText: "aeronautical"

,"text: "Which engineers work with ships?", options: ["marine", "electronic", "civil }
,{ "medical"], correctText: "marine"

,"text: "Which engineers work with roads and bridges?", options: ["electrical", "civil }
,{ "medical", "marine"], correctText: "civil"

,"text: "Electronic engineers are concerned with:", options: ["roads", "electricity }
,{ "communication equipment", "cars"], correctText: "communication equipment"

,"text: "Mechanical engineers deal with:", options: ["machines", "electricity }
,{ "medicine", "chemicals"], correctText: "machines"

,"text: "Electrical engineers deal with:", options: ["machines", "electricity", "roads }
,{ "cars"], correctText: "electricity"

,"text: "Civil engineers deal with:", options: ["bridges", "computers", "electricity }
,{ "medicine"], correctText: "bridges"

,"text: "Electronic engineering is concerned with:", options: ["food }
,{ "communications", "roads", "cars"], correctText: "communications"

,"text: "Which engineering branch includes automobile?", options: ["civil }
,{ "mechanical", "electrical", "electronic"], correctText: "mechanical"

,"text: "Which engineering branch includes marine?", options: ["civil", "mechanical }
,{ "electrical", "electronic"], correctText: "mechanical"

,"text: "Which engineering branch includes aeronautical?", options: ["civil }
,{ "mechanical", "electrical", "electronic"], correctText: "civil"

:text: "Which engineering branch includes heating and ventilation?", options }
,{ "civil", "mechanical", "electrical", "electronic"], correctText: "mechanical"]

,"text: "Which engineering branch includes lighting?", options: ["civil", "mechanical }
,{ "electrical", "electronic"], correctText: "electronic"

text: "Scanning a table means:", options: ["reading every word", "searching for }
specific info", "memorizing the table", "ignoring the table"], correctText: "searching for
,{ "specific info

,"text: "Scanning is used to:", options: ["find exact information", "read slowly }
,{ "summarize text", "translate text"], correctText: "find exact information"

,"text: "Engineers must read tables because:", options: ["tables are decorative }
:tables contain important data", "tables are optional", "tables are rare"], correctText"
,{ "tables contain important data"

,"text: "Scanning requires:", options: ["reading everything", "ignoring irrelevant info }
,{ "memorizing the table", "writing notes"], correctText: "ignoring irrelevant info"

,"text: "Scanning is best for:", options: ["finding specific words", "reading stories }
,{ "writing essays", "memorizing"], correctText: "finding specific words"

/* MATERIALS */

,["text: "Aluminum is:", options: ["heavy", "soft and light", "brittle", "weak }
,{ "correctText: "soft and light

,["text: "Aluminum is used for:", options: ["aircraft", "roads", "medicine", "food }
,{ "correctText: "aircraft

,["text: "Copper is:", options: ["brittle", "very malleable", "weak", "non-conductive }
,{ "correctText: "very malleable

,["text: "Copper is used for:", options: ["electric wiring", "bridges", "cars", "medicine }
,{ "correctText: "electric wiring

,["text: "Brass is:", options: ["iron + carbon", "copper + zinc", "plastic", "wood }
,{ "correctText: "copper + zinc

text: "Mild steel contains:", options: ["0.15−0.3% carbon", "5% carbon", "0% }
,{ "carbon", "10% carbon"], correctText: "0.15−0.3% carbon

-text: "High carbon steel is:", options: ["soft", "hardest carbon steel", "weak", "non }
,{ "metal"], correctText: "hardest carbon steel

,["text: "ABS is:", options: ["metal", "thermoplastic", "thermosetting", "ceramic }
,{ "correctText: "thermoplastic

,["text: "Acrylic is:", options: ["metal", "thermoplastic", "wood", "ceramic }
,{ "correctText: "thermoplastic

,["text: "Nylon is:", options: ["brittle", "self-lubricating", "weak", "non-durable }
,{ "correctText: "self-lubricating

,["text: "Epoxy resin is:", options: ["thermoplastic", "thermosetting", "metal", "wood }
,{ "correctText: "thermosetting

:text: "Polyester resin is:", options: ["soft", "brittle", "metal", "wood"], correctText }
,{ "brittle"

-text: "Urea formaldehyde is:", options: ["heat-resistant", "soft", "weak", "non }
,{ "insulating"], correctText: "heat-resistant

,"text: "Which material is corrosion resistant?", options: ["aluminum", "mild steel }
,{ "high carbon steel", "wood"], correctText: "aluminum"

,"text: "Which material is used for aircraft canopies?", options: ["acrylic", "nylon }
,{ "ABS", "steel"], correctText: "acrylic"

,"text: "Which material is used for safety helmets?", options: ["ABS", "nylon }
,{ "acrylic", "steel"], correctText: "ABS"

,"text: "Which material is used for gears?", options: ["nylon", "acrylic", "ABS }
,{ "wood"], correctText: "nylon"

,"text: "Which material is used for boat bodies?", options: ["polyester resin }
,{ "aluminum", "nylon", "copper"], correctText: "polyester resin"

,"text: "Which material is tough and ductile?", options: ["copper", "acrylic", "ABS }
,{ "wood"], correctText: "copper"

,"text: "Which material is stiff and brittle?", options: ["polyester resin", "nylon }
,{ "ABS", "aluminum"], correctText: "polyester resin"

text: "Which material is a good electrical insulator?", options: ["urea }
,{ "formaldehyde", "copper", "aluminum", "steel"], correctText: "urea formaldehyde

,"text: "Which material is used for PCBs?", options: ["copper", "nylon", "ABS }
,{ "steel"], correctText: "copper"

,"text: "Which material is used for tubing?", options: ["copper", "wood", "steel }
,{ "nylon"], correctText: "copper"

,"text: "Which material is used for double glazing?", options: ["acrylic", "nylon }
,{ "ABS", "steel"], correctText: "acrylic"

,"text: "Which material is used for adhesives?", options: ["epoxy resin", "nylon }
,{ "ABS", "steel"], correctText: "epoxy resin"

,"text: "Which material is heat resistant?", options: ["urea formaldehyde", "nylon }
,{ "ABS", "wood"], correctText: "urea formaldehyde"

,"text: "Which material is used for castings?", options: ["polyester resin", "nylon }
,{ "ABS", "steel"], correctText: "polyester resin"

,"text: "Which material is used for bearings?", options: ["nylon", "acrylic", "ABS }
,{ "steel"], correctText: "nylon"

,"text: "Which material is used for telephones?", options: ["ABS", "nylon", "acrylic }
,{ "steel"], correctText: "ABS"

,"text: "Which material is used for cooking utensils?", options: ["aluminum", "nylon }
,{ "ABS", "steel"], correctText: "aluminum"

/* POWER STATIONS */

& text: "Who thought of the first power station?", options: ["Einstein", "Edison }
,{ "Johnson", "Newton", "Tesla"], correctText: "Edison & Johnson

,"text: "When was the first power station built?", options: ["1882", "1920", "1750 }
,{ "correctText: "1882 ,["2000"

,"text: "The first power station was powered by:", options: ["water", "steam engine }
,{ "solar", "wind"], correctText: "steam engine"

,"text: "Electricity was supplied through:", options: ["roads", "water pipes", "air }
,{ "tunnels"], correctText: "water pipes"

text: "Customers of the first station included:", options: ["hospitals", "Telegraph }
,{ "Office", "schools", "factories"], correctText: "Telegraph Office

text: "Today, electricity is supplied through:", options: ["underground & overhead }
,{ "cables", "pipes", "air", "tanks"], correctText: "underground & overhead cables

,"text: "Electricity is vital for:", options: ["decoration", "daily activities", "sports only }
,{ "nothing"], correctText: "daily activities"

text: "Modern power stations use:", options: ["only steam", "various energy }
,{ "forms", "only coal", "only gas"], correctText: "various energy forms

:text: "The opposite of 'last' is:", options: ["first", "end", "final", "late"], correctText }
,{ "first"

,["text: "The opposite of 'destroyed' is:", options: ["built", "broken", "lost", "removed }
,{ "correctText: "built

,"text: "The opposite of 'took away' is:", options: ["supplied", "removed", "lost }
,{ "destroyed"], correctText: "supplied"

,"text: "The opposite of 'consume' is:", options: ["generate", "eat", "remove }
,{ "break"], correctText: "generate"

text: "A turbine is part of:", options: ["a power station", "a car", "a bridge", "a }
,{ "computer"], correctText: "a power station

,["text: "A generator produces:", options: ["heat", "electricity", "water", "air }
,{ "correctText: "electricity

,"text: "Cooling water is used to:", options: ["heat the turbine", "cool the system }
,{ "generate electricity", "clean pipes"], correctText: "cool the system"

text: "A condenser is used to:", options: ["cool steam", "heat water", "store }
,{ "electricity", "move turbines"], correctText: "cool steam

,"text: "Power stations today exist:", options: ["only in cities", "all over the world }
,{ "only in Europe", "only in America"], correctText: "all over the world"

,"text: "Electricity reaches:", options: ["short distances only", "any desired location }
,{ "only cities", "only villages"], correctText: "any desired location"

,"text: "The first power station used:", options: ["solar energy", "steam engine }
,{ "wind", "nuclear"], correctText: "steam engine"

,"text: "Modern stations are:", options: ["unchanged", "highly developed", "rare }
{ "unused"], correctText: "highly developed"

;[

```
;let score = 0

;let answeredCount = 0


} (function shuffle(array

} (--for (let i = array.length - 1; i > 0; i

;((const j = Math.floor(Math.random() * (i + 1

;[[array[i], array[j]] = [array[j], array[i]

{

;return array

{


;("const quizDiv = document.getElementById("quiz


} <= (questionsData.forEach((q, index

;([const shuffledOptions = shuffle([...q.options

;("const qDiv = document.createElement("div

;"qDiv.className = "question

;qDiv.id = "question-" + index


;("const title = document.createElement("div

;"title.className = "question-title

;title.textContent = (index + 1) + ". " + q.text

;(qDiv.appendChild(title


;("const optionsDiv = document.createElement("div

;"optionsDiv.className = "options
```

```
} <= (shuffledOptions.forEach((opt
;("const label = document.createElement("label
;("const input = document.createElement("input
;"input.type = "radio
;input.name = "q" + index
;input.value = opt

} () input.addEventListener("change", function
;if (qDiv.dataset.answered) return
;"qDiv.dataset.answered = "true
;++answeredCount
;(handleAnswer(index, opt, q.correctText
;({

;(label.appendChild(input
;((label.appendChild(document.createTextNode(opt
;(optionsDiv.appendChild(label
;({

;("const feedbackDiv = document.createElement("div
;"feedbackDiv.className = "feedback
;feedbackDiv.id = "feedback-" + index

;(qDiv.appendChild(optionsDiv
;(qDiv.appendChild(feedbackDiv
;(quizDiv.appendChild(qDiv
;({
```

```
} (function handleAnswer(qIndex, chosenText, correctText
;(const qDiv = document.getElementById("question-" + qIndex
;(const feedbackDiv = document.getElementById("feedback-" + qIndex
;('const inputs = qDiv.querySelectorAll('input
;(inputs.forEach(inp => inp.disabled = true

} (if (chosenText === correctText
;++score
;("qDiv.classList.add("correct-border
;("feedbackDiv.classList.add("correct
;"!feedbackDiv.textContent = "✔ Correct
} else {
;("qDiv.classList.add("incorrect-border
;("feedbackDiv.classList.add("incorrect
;feedbackDiv.textContent = "✘ Wrong. Correct answer: " + correctText
{
{
```

/* برمجة زر إظهار النتيجة */

```
} ()document.getElementById("scoreBtn").onclick = function
;("const resultBox = document.getElementById("resultBox
;const total = questionsData.length
;(const percentage = Math.round((score / total) * 100

;"resultBox.style.display = "block
```

```
;"" = let msg

;"🏆 .if (percentage >= 90) msg = "Excellent! You're a pro

;"🌟 !else if (percentage >= 70) msg = "Great work

;"👍 .else if (percentage >= 50) msg = "Good effort

;"📚 !else msg = "Keep studying


` = resultBox.innerHTML

<h2 style="color: #1e3c72; margin-top: 0;">Exam Results</h2>

/ {div style="font-size: 48px; font-weight: bold; color: #2a5298;">${score>
<total}</div}$

<div style="font-size: 24px; margin: 10px 0;">Score: ${percentage}%</div>

<p style="font-size: 18px; color: #555;">${msg}</p>

p style="font-size: 14px; color: #888;">Answered ${answeredCount} out of>
<total} questions.</p}$
;`


;({ 'resultBox.scrollIntoView({ behavior: 'smooth', block: 'center

;{

<script/>


<body/>

<html/>
```