Oracle Cloud Infrastructure 2024 Generative AI Professional  
Exam Number: 1Z0-1127-24

The **Oracle Cloud Infrastructure Generative AI Professional** course caters to Software Developers, Machine Learning/AI Engineers, and Gen AI Professionals. It offers an in-depth technical introduction to Large Language Models (LLMs), covering various aspects such as LLM architecture, fine-tuning techniques, code models, multimodal LLMs, and language agents. Additionally, the course covers topics like pretrained foundational models, summarization, embeddings, Dedicated AI Clusters, and the OCI Generative AI security architecture.

**Skills you will learn:**

* **Fundamentals of Large Language Models (LLMs):**LLM basics,LLM architectures, Prompt Engineering, Fine-tuning techniques, fundamentals of code models, Multi-modal LLMs and Language Agents
* **OCI Generative AI Deep-Dive:**Pretrained Foundational Models (Generation, Summarization, Embedding), Flexible Fine-tuning including T-Few technique, Model Inference, Dedicated AI Clusters, Generative AI Security architecture
* **Build a Conversational Chatbot with OCI Generative AI:**Understand RAG, Vector Databases, Semantic Search, build chatbot using LangChain Framework (Prompts, Models, Memory, Chains), Trace and Evaluate chatbot and deploy on OCI

**Review exam topics**

|  |  |
| --- | --- |
| Objectives | % of Exam |
| Fundamentals of Large Language Models (LLMs) | 20% |
| Using OCI Generative AI Service | 45% |
| Building an LLM Application with OCI Generative AI Service | 35% |

Fundamentals of Large Language Models (LLMs)

* Explain the fundamentals of LLMs
* Understand LLM architectures
* Design and use prompts for LLMs
* Understand LLM fine-tuning
* Understand the fundamentals of code models, multi-modal, and language agents

Using OCI Generative AI Service

* Explain the fundamentals of OCI Generative AI service
* Use pretrained foundational models for Generation, Summarization, and Embedding
* Create dedicated AI clusters for fine-tuning and inference
* Fine-tune base model with custom dataset
* Create and use model endpoints for inference
* Explore OCI Generative AI security architecture

Building an LLM Application with OCI Generative AI Service

* Understand Retrieval Augmented Generation (RAG) concepts
* Explain vector database concepts
* Explain semantic search concepts
* Build LangChain models, prompts, memory, and chains
* Build an LLM application with RAG and LangChain
* Trace and evaluate an LLM application
* Deploy an LLM application