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FOR GOA CLASS 10 PREPARATION

Goa Board Class 10 Syllabus 2027 Game Developer Trainee

EXAM	YEAR	TYPE
Goa Class 10	2027	Syllabus

NSQF Aligned Game Developer Trainee (1101) – Grade 10 Syllabus

Employability Skills

Unit	Theory	Practical
Communication Skills - II	Methods of communication • Verbal. • Non-verbal. • Visual.	• Writing pros and cons of written, verbal and nonverbal communication • Listing do's and Don'ts for avoiding common body language mistakes
	• Communication cycle and importance of feedback. • Meaning and importance of feedback.	• Constructing sentences for providing descriptive and specific feedback.
	• Barriers to effective communication – types and factors • Measures to overcome barriers in effective Communication.	• Enlisting barriers to effective communication. • Applying measures to overcome barriers in communication.
	• Principles of effective communication. • 7 Cs of effective communication.	• Constructing sentences that convey all facts required by the receiver. • Exercises and games on applying 7Cs of effective communication.
	Writing skills to the following: Sentence, Phrase, Kinds of Sentences, Parts of Sentence, Parts of Speech, Articles, Construction of a Paragraph.	Demonstration and practice of writing sentences and paragraphs on topics related to the subject.
Self Management Skills - II	Meaning and importance of stress management Stress management techniques – physical exercise, yoga, meditation Enjoying, going to vacations and holidays with family and friends Taking nature walks	Exercises on stress management techniques – yoga, meditation, physical exercises. Preparing a write-up on an essay on experiences during a holiday trip.
	Importance of the ability to work independently. Describe the types of self awareness. Describe the meaning of self-motivation and self regulation.	Demonstration on working independently goals. Planning of an activity Executing tasks in a specific period, with no help or directives. Demonstration on the qualities required for working independently.
ICT Skills - II	• Classes of operating systems • Menu, icons and task bar on the desktop • File concept, file operations, file organization, directory structures, and file-system structures • Creating and managing files and folders	Identification of task bar, icons, menu, etc. • Demonstration and practising of creating, renaming and deleting files and folders, saving files in folders and sub-folders, restoring files and folders from recycle bin
	• Importance and need of care and maintenance of computer	Demonstration of the procedures to be followed for cleaning, care and

	• Cleaning computer components • Preparing maintenance schedule • Protecting computer against viruses • Scanning and cleaning viruses and removing SPAM files, temporary files and folders	maintenance of hardware and software
Entrepreneurial Skills – II	Entrepreneurship and society. Qualities and functions of an entrepreneur. Role and importance of an entrepreneur. Myth about entrepreneurship. Entrepreneurship as a career option.	Writing a note on entrepreneurship as career option. Collecting success stories of first generation and local entrepreneurs. Listing the entrepreneurial qualities – analysis of strength and weaknesses. Group discussion of self qualities that students feel are needed to become successful entrepreneur. Collect information and related data for a business. Make a plan in team for setting up a business.
Green Skills -II	Definition of sustainable development. Importance of sustainable development. Problems related to sustainable development.	Identify the problem related to sustainable development in the community. Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage. Discussion on the responsibilities and benefits of environmental. citizenship, including the conservation and protection of environmental values. Preparing models on rainwater harvesting, drip /sprinkler irrigation, vermicompost, solar energy, solar cooker, etc.

Vocational Skills

Unit	Theory	Practical
Object-Oriented Concepts	1. What is the problem with procedural programming? 2. Concept of messages, sender and receivers 3. Visualising code as the composition of messages 4. Objects are not data	● Hiding data and exposing behaviours ● Designing code as descriptive behaviours ● Refactoring procedural game into object-oriented game: ● Set of codes to functions ● Hiding data with closures ● Grouping functions into objects

2D game development	1. Sprites vs. images or pictures	●Creating smooth animations
	1. External events (Keyboard or mouse inputs) 2. Internal events (timer, state change etc)	● Controlling sprites and animations based on internal and external events
	1. How collision detection works	●Implement full game with events and collision detection ●Implement scoring
	How sounds can make games more interesting and add to storytelling	Add sound effect to games
Platforms and Levels	1. What are different platform games? 2. Planning your platform game	● Building a platformer game
	1. Designing levels 2. Random levels 3. Level progressions	●Adding more levels to games
	Desktop vs. Mobile: Things to remember	●Exporting games to run on desktop and Android for distribution