ARPUTHA COLLEGE OF ARTS AND SCIENCE
(Affiliated to Bharathidasan University - Tiruchirappalli)

ARPUTHA NAGAR, VAMBAN-622303
Organized by

DEPARTMENT OF COMPUTER SCIENCE

Cordially invites you for the inaugural function of
Value-Added Course
On
"Android Application Development with KOTLIN"

Date: 27.10. 2021   Time: 10.00 am

Venue: Auditorium

Programme Co-ordinator:

DR. G. THILIPKUMAR

Staff Members:

SR. A. ANTONYAMMAL
MS. C. VAIJAYANTHIMALA

Android Development with Kotlin

Date :

DEPARTMENT OF COMPUTER SCIENCE
VALUE ADDED COURSE (2021 – 2022)
ANDROID APPLICATION DEVELOPMENT WITH KOTLIN
SYLLABUS

TOTAL HRS: 57HRS

Unit I: KOTLIN BASICS

Introduction to Kotlin – Benefits – Different formats of availability – Kotlin Basics: Operators – Data types – Typecasting – Strings – String template expressions – variables – Conditionals and Loops – lists and arrays – Null safety. Functions – Different parameter passing mechanisms – Compact functions – Lambda and Higher order functions

Unit II: CLASSES AND OBJECTS

Classes: Constructors, Properties and Access modifiers – Inheritance – Interface – Abstract classes - Extension functions - Special classes: Data class, Pair and Triple, Pair To, Enum, Singleton, Companion. Packages.

Unit III: INTRODUCTION TO ANDROID

Anatomy of Android App – Layouts – Resources – Activities – Gradle files – Accessibility – Working with different layout types – Data binding. App Navigation: Multiple activities and intent – App Bar, Navigation drawer and menus – Fragments – Navigation UI.

Unit IV: ANDROID APPLICATION ARCHITECTURE

Activity Lifecycle – Logging – Fragment Lifecycle – Tasks and Back-stack – App Architecture UI: View model – data binding – Live data and its transforms. App Architecture Persistence: Storage – Room library – Asynchronous programming – Co-routines – Testing DB. Recycler Viewer – Advanced binding

Unit V: NETWORKING AND UI DESIGN

Networking: Android permissions – Connect to, use internet resources – web services. UI Design: Android styling – Typography – Material Design and components – Localization.

REFERENCE BOOKS:

S.NO	NAME OF THE BOOK	AUTHOR
1.	Kotlin in Action	Dmitry Jemerov and Svetlana Isakova
2.	Android Development with Kotlin	Marcin Moskala and Igor Wojda
3	**Extensive Reading:** https://developer.android.com/courses/android-development-with-kotlin/course	-

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DEPARTMENT OF COMPUTER SCIENCE

VALUE ADDED COURSE (2021 – 2022)

ANDROID APPLICATION DEVELOPMENT WITH KOTLIN

Students Name List

Time : 1 Hrs/day

Duration: 57 Hrs

S.NO	STUDENT NAME	DEPARTMENT	REG. NO	SIGNATURE
1	M.FLORA	II-BCOM	CB20C70827	M.Floora
2	A.JENITTA	II-BCOM	CB20C70828	A. Jenitta
3	M.KAVIYA DHARANI	II-BCOM	CB20C70829	M.Kaviyadharani
4	M.SINDHU	II-BCOM	CB20C70835	M.sindhu
5	B.SUBHASHINI	II-BCOM	CB20C70837	B.subhasini
6	S.AMALA CHINNA RANI	III-CS	CB19S193451	S.Amalachinnarani
7	P.KASTHURI	III-CS	CB19S193456	P.Kasthuri
8	R.NIVETHINI	III-CS	CB19S193462	R.Nivethini
9	R.ABIRAMI	II-CS	CB20S199435	R.Abirami
10	J.EBIBANIYA	II-CS	CB20S199440	J.Ebibaniya
11	V.FEVIN SANTHAYEE	II-CS	CB20S199441	V.fevin santhaye
12	A.FENCY FLORA	I-M.SC (CS)	P21272325	A.fencyflora
13	A.MOUNIKA	I-M.SC (CS)	P21272326	A.Mounika
14	A.RAJALAKSHMI	I-M.SC (CS)	P21272327	A.Rajalakshmi
15	R.VIJAYALAKSHMI	I-M.SC (CS)	P21272329	R.vijeyalakshmi
16	S.ANTONYAMMAL	II-M.SC (CS)	P20273101	S.Antonyammal
17	M.SAHAYA DAISY	II-M.SC (CS)	P20273103	M.Sahayadaisy
18	K.THULASIMANI	II-M.SC (CS)	P20273104	K.Thulasimani
19	S.VETRISELVI	II-M.SC (CS)	P20273105	S.vetriselvi
20	R.ELACKIYA	II- B.SC (MATHS)	CB20S378203	R.Elackiya
21	V.MAHADEVI	II -B.SC (MATHS)	CB20S378205	V.Mahadevi

22	S.MESMIN STEPHY	II- B.SC (MATHS)	CB20S378206	S.Mesminstephy
23	S.POORANAM	II -B.SC (MATHS)	CB20S378207	S. Pooranam
24	K.SINDHU	II -B.SC (MATHS)	CB20S378209	K. Sindhu
24	U.ELIZABETH PENIKINA	II-M.SC (MATHS)	P20193101	U. Elizabeth
26	S.KALAIVANI	II-M.SC (MATHS)	P20193102	S. Kalaivani
27	R.LOURDHU MARY	II-M.SC (MATHS)	P20193103	R. Lourthmary
28	J.MARIYANNAL	II-M.SC (MATHS)	P20193104	J.Mariyannal
29	P.MEENA	II-M.SC (MATHS)	P20193105	P. Meena
30	V.DEVADHARSHINI	I-M.SC (MATHS)	P21192326	V.Devadharshini
31	K.RAMYA	I-M.SC (MATHS)	P21192334	K. Ramya
32	M.SANGAVI	I-M.SC (MATHS)	P21192336	M. Sangavi
33	T.KALEESWARI	I-B.SC (MATHS)	CB21S381672	T.Kaleeswari
34	M.MADHINA	I-B.SC (MATHS)	CB21S381673	M.Madhina
35	R.PARVATHI	III-B.SC MB	CB19S410553	R.Parvathi
36	S.POTHUMPONNU	III-B.SC MB	CB19S410555	S-Pothumponnu
37	S.PRAVEENA	III-B.SC MB	CB19S410556	S. Praveena
38	M.RUTHRADEVI	III-B.SC MB	CB19S410559	M. Ruthradevi
39	P.THAMIZHINI	III-B.SC MB	CB19S410562	P. Thamizhini
40	J.SNEKA	II-B.SC MB	CB20S411796	J.Sneka
41	S.SUBITHA	II-B.SC MB	CB20S411798	S. subitha
42	R.VINOTHINI	II-B.SC MB	CB20S411800	R. Vinothini
43	F.MONIKA	I- B.SC MB	CB21S412897	f. Monika
44	V.POTHUM PONNU	I- B.SC MB	CB21S412900	V. Pothumponnu

PRINCIPAL
ARPUTHA COLLEGE OF ARTS & SCIENCE
VAMBAN - 622 303.

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VAMBAN
PIN: 622303

HEAD OF THE DEPARTMENT
DEPARTMENT OF COMPUTER SCIENCE,
ARPUTHA COLLEGE OF ARTS AND SCIENCE,
VAMBAN - 622 303.

ARPUTHA COLLEGE OF ARTS AND SCIENCE - VAMBAN
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DEPARTMENT OF COMPUTER SCIENCE
VALUE ADDED COURSE-2021-2022
ANDROID APPLICATION DEVELOPMENT WITH KOTLIN
STUDENTS ATTENDANCE SHEET

Duration: 57 Hrs

S.NO	STUDENT NAME	DEPARTMENT
1	M.FLORA	II-BCOM
2	A.JENITTA	II-BCOM
3	M.KAVIYA DHARANI	II-BCOM
4	M.SINDHU	II-BCOM
5	B.SUBHASHINI	II-BCOM
6	S.AMALA CHINNA RANI	III-CS
7	P.KASTHURI	III-CS
8	R.NIVETHINI	III-CS
9	R.ABIRAMI	II-CS
10	J.EBIBANIYA	II-CS
11	V.FEVIN SANTHAYEE	II-CS
12	A.FENCY FLORA	I-M.SC (CS)
13	A.MOUNIKA	I-M.SC (CS)
14	A.RAJALAKSHMI	I-M.SC (CS)
15	R.VIJAYALAKSHMI	I-M.SC (CS)
16	S.ANTONYAMMAL	II-M.SC (CS)
17	M.SAHAYA DAISY	II-M.SC (CS)
18	K.THULASIMANI	II-M.SC (CS)
19	S.VETRISELVI	II-M.SC (CS)
20	R.I.LACKIYA	II- B.SC (MATHS)
21	V.MAHADEVI	II -B.SC (MATHS)
22	S.MESMIN STEPHY	II- B.SC (MATHS)
23	S.POORANAM	II -B.SC (MATHS)

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STUDENTS ATTENDANCE SHEET

S.NO	STUDENT NAME	DEPARTMENT
24	K.SINDHU	II -B.SC (MATHS)
25	U.ELIZABETH PENIKINA	II-M.SC (MATHS)
26	S.KALAIVANI	II-M.SC (MATHS)
27	R.LOURDHU MARY	II-M.SC (MATHS)
28	J.MARIYANNAL	II-M.SC (MATHS)
29	P.MEENA	II-M.SC (MATHS)
30	V.DEVADHARSHINI	I-M.SC (MATHS)
31	K.RAMYA	I-M.SC (MATHS)
32	M.SANGAVI	I-M.SC (MATHS)
33	T.KALEESWARI	I-B.SC (MATHS)
34	M.MADHINA	I-B.SC (MATHS)
35	R.PARVATHI	III-B.SC MB
36	S.POTHUMPONNU	III-B.SC MB
37	S.PRAVEENA	III-B.SC MB
38	M.RUTHRADEVI	III-B.SC MB
39	P.THAMIZHINI	III-B.SC MB
40	J.SNEKA	II-B.SC MB
41	S.SUBITHA	II-B.SC MB
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S.NO	STUDENT NAME	DEPARTMENT	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	Tot-No-of Hoors Attended	Remarks
1	M.FLORA	II-BCOM	x	x	x	x	x	x	x	x	x	a	v	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	56	
2	A.JENITTA	II-BCOM	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	57	
3	M.KAVIYA DHARANI	II-BCOM	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	a	x	x	x	x	x	x	x	x	x	x	55	
4	M.SINDHU	II-BCOM	x	x	a	x	x	x	x	a	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	54	
5	B.SUBHASHINI	II-BCOM	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	52	
6	S.AMALA CHINNA RANI	III-CS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	57	
7	P.KASTHURI	III-CS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	53	
8	R.NIVETHINI	III-CS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	55	
9	R.ABIRAMI	II-CS	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	52	
10	J.EBIBANIYA	II-CS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	55	
11	V FEVIN SANTHAYEE	II-CS	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	56	
12	A.FENCY FLORA	I-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	a	x	x	x	x	x	50	
13	A MOUNIKA	I-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	54	
14	A.RAJALAKSHMI	I-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	a	a	x	x	x	x	x	x	x	a	x	x	x	a	x	48	
15	R VIJAYALAKSHMI	I-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x	52	
16	S.ANTONYAMMAL	II-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	55	
17	M.SAHAYA DAISY	II-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	54	
18	K THULASIMANI	II-M.SC (CS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	a	x	x	x	x	x	x	54	
19	S VETRISELVI	II-M.SC (CS)	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	53	
20	R ELACKIYA	II- B.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	56	
21	V MAHADEVI	II -B.SC (MATHS)	x	x	x	x	x	x	a	x	a	a	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	a	a	48	
22	S MUSMIN STEPHY	II- B.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	52	
23	S POORANAM	II -B.SC (MATHS)	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	56	

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DEPARTMENT OF COMPUTER SCIENCE
VALUE ADDED COURSE-2021-2022
ANDROID APPLICATION DEVELOPMENT WITH KOTLIN
STUDENTS ATTENDANCE SHEET

S.NO	STUDENT NAME	DEPARTMENT	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	Tot-No-of Hours Attended	Remarks
24	K.SINDHU	II -B.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	57	
25	U.ELIZABETH PENIKINA	II-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	51	
26	S.KALAIVANI	II-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	52	
27	R.LOURDHU MARY	II-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	a	x	x	x	x	x	x	52	
28	J.MARIYANNAL	II-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	a	x	x	x	50	
29	P.MEENA	II-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	51	
30	V.DEVADHARSHINI	I-M.SC (MATHS)	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	53	
31	K.RAMYA	I-M.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	55	
32	M.SANGAVI	I-M.SC (MATHS)	x	x	a	x	x	a	x	x	x	x	x	x	x	x	a	x	x	a	x	x	x	a	x	a	a	x	x	46	
33	T.KALEESWARI	I-B.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	57	
34	M.MADHINA	I-B.SC (MATHS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	57	
35	R.PARVATHI	III-B.SC MB	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	50	
36	S.POTHUMPONNU	III-B.SC MB	x	x	x	x	x	x	x	x	x	a	x	a	a	a	x	x	x	x	x	x	a	a	a	x	x	x	x	48	
37	S.PRAVEENA	III-B.SC MB	x	x	x	x	x	x	x	x	x	x	a	a	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	52	
38	M.RUTHRADEVI	III-B.SC MB	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	54	
39	P.THAMIZHINI	III-B.SC MB	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	a	x	x	a	a	a	49	
40	J.SNEKA	II-B.SC MB	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	54	
41	S.SUBITHA	II-B.SC MB	x	x	x	x	x	x	x	x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	55	
42	R.VINOTHINI	II-B.SC MB	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	55	
43	F.MONIKA	I- B.SC MB	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	56	
44	P.RUTHUM PONNU	I- B.SC MB	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	53	

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DEPARTMENT OF COMPUTER SCIENCE
ARPUTHA COLLEGE OF ARTS AND SCIENCE
VAMBAN - 622 303.

CO-ORDINATOR

Date :

DEPARTMENT OF COMPUTER SCIENCE
VALUE ADDED COURSE (2021 – 2022)
ANDROID APPLICATION DEVELOPMENT WITH KOTLIN
REPORT

Build a series of apps in Kotlin, which is the language that the majority of professional Android developers use. Incorporate and convert Java code into Kotlin using Android Studio, and learn Kotlin language conventions along the way. You'll also learn how to write Kotlin code to make it callable from Java code.

The course started on 02.11.2021 and ended on 28.02.2022. The Academic Council Members appointed Dr. G. Thilipkumar as the course coordinator.

In its successful completion, they learn a lot of things. They will be able to work with Snack Bar, Menus, Activities, Navigation and Views Android Dialogs, Themes and Menus Toasts, and SQLite and Content Providers Location using GPS and Google Maps. Earn it from Multisoft Virtual Academy if you want to become an efficient programmer in Kotlin!

In its successful completion, they will be able to accomplish:
- How to use Android Studio to build your app
- How to run your app on a device or in the emulator
- How to add interactive buttons
- How to display a second screen

Out of 44 Students 44 Students were benefited by this course. Students who attended more than 45hours were provided certificates.

In this session learnt how to write Kotlin code to make it callable from Java code.
Certificates were issued to all the participants after the completion of the course
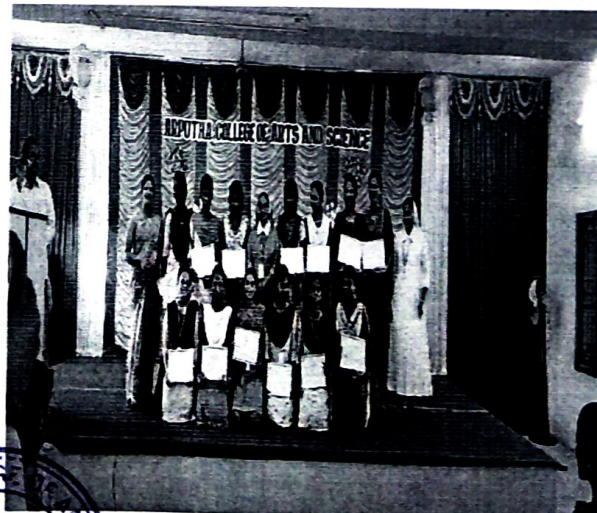
ARPUTHA COLLEGE OF ARTS AND SCIENCE

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Arputha Nagar, Vamban - 622303, Alangudi(TK), Pudukkottai(DT).

SKILL DEVELOPMENT PROGRAMME

Value Added - Course

Certificate

SUBCODE : 21CSVAAADWK

This is to Certify that ........M.FLORA..

of ....II - B.COM... has completed Value Added Course on

Android appl. development with kotlin.......... conducted by the Department of

..Computer Science................................ during 2021-2022/odd.. Semester.

Course
Co-Ordinator
COURES CO-ORDINATOR
Arputha College of Arts and Science
Arputha Nagar, Vamban,
Pudukkottai (Dt) - 622 303.

Head of the
Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF COMPUTER SCIENCE,
ARPUTHA COLLEGE OF ARTS AND SCIENCE,
VAMBAN - 622 303.

Principal
PRINCIPAL
ARPUTHA COLLEGE OF ARTS & SCIE...
VAMBAN - 622 303.

ARPUTHA COLLEGE OF ARTS AND SCIENCE

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Arputha Nagar, Vamban - 622303, Alangudi(TK), Pudukkottai(DT).

SKILL DEVELOPMENT PROGRAMME
Value Added - Course
Certificate

SUBCODE : 21CSVAAADWK

This is to Certify that ...... R.ELACKIYA ......

of ... II. B.Sc. Mathematics .... has completed Value Added Course on

Android appl. Development with Kotlin ... conducted by the Department of

Computer Science ...... during 2021-2022 / ODD Semester.

Course
Co-Ordinator
COURES CO-ORDINATOR
Arputha College of Arts and Scienc
Arputha Nagar, Vamban,
Pudukkottai (Dt) - 622 303,

Head of the
Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF COMPUTER SCIENCE,
ARPUTHA COLLEGE OF ARTS AND SCIENCE,
VAMBAN - 622 303.

Principal
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ARPUTHA COLLEGE OF ARTS & SCIENC
VAMBAN - 622 303.

ARPUTHA COLLEGE OF ARTS AND SCIENCE

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Arputha Nagar, Vamban - 622303, Alangudi(TK), Pudukkottai(DT).

SKILL DEVELOPMENT PROGRAMME
Value Added - Course
Certificate

SUB CODE : 2ICSVAAADWK

This is to Certify that .... R. PARVATHI ....

of ...... III - B.Sc. Microbiology .... has completed Value Added Course on

Android appl. Development with Kotlin .... conducted by the Department of

Computer Science .... during .... Semester.

Course
Co-Ordinator
COURES CO-ORDINATOR
Arputha College of Arts and Science
Arputha Nagar, Vamban,
Pudukkottai (Dt) - 622 303.

Head of the
Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF COMPUTER SCIENCE,
ARPUTHA COLLEGE OF ARTS AND SCIENCE,
VAMBAN - 622 303.

Principal
PRINCIPAL
ARPUTHA COLLEGE OF ARTS & SCIE!
VAMBAN - 622 303.

ARPUTHA COLLEGE OF ARTS AND SCIENCE

(Affiliated to Bharathidasan University)

Arputha Nagar, Vamban - 622303, Alangudi(TK), Pudukkottai(DT).

SKILL DEVELOPMENT PROGRAMME
Value Added - Course
Certificate

SUBCODE : 21CSVAAADWK

This is to Certify that .... M. SAHAYA DAISY ....

of ..... II M.Sc Computer Science .... has completed Value Added Course on

Android App Development with Kotlin .. conducted by the Department of

.. Computer Science .... during 2021-2022/odd. Semester.

Course
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VAMBAN - 622 303.

ARPUTHA COLLEGE OF ARTS AND SCIENCE, VAMBAN
DEPARTMENT OF (COMPUTER SCIENCE)
CERTIFICATE COURSE ASSESSMENT (2021-2022)
ANDROID APPLICATION DEVELOPMENT WITH KOTLIN
MULTIPLE CHOICE QUESTIONS

STUDENTS NAME: DURATION: 30 Min
SUBJECT CODE: 21CSVAAADWK   MAX MARKS: 50
                    ANSWER ALL QUESTIONS

1. Android is -
   - an operating system
   - a web browser
   - a web server
   - None of the above

2. Under which of the following Android is licensed?
   - OSS
   - Source forge
   - Apache/MIT
   - None of the above

3. What is the syntax for creating a subclass in Kotlin?
   - Class Subclass: Superclass
   - Class Subclass extends Superclass
   - Class Subclass inherits Superclass
   - Class Subclass implements Superclass

4. For which of the following Android is mainly developed?
   - Servers
   - Desktops
   - Laptops
   - Mobile devices

5. Which of the following virtual machine is used by the Android operating system?
   - JVM
   - Dalvik virtual machine
   - Simple virtual machine
   - None of the above

6. What is the syntax for calling a method in Kotlin?
   - Object method()
   - Object function()
   - Object procedure()
   - Object call()

7. What is the keyword used to define a class in Kotlin?
   - Class
   - Struct
   - Object
   - Type

8. What is the keyword used to define an interface in Kotlin?
- Abstract
- Class
- Object
- Interface

9. Android is based on which of the following language?
- Java
- C++
- C
- None of the above

10. What is the keyword used to define a singleton class in Kotlin?
- Singleton
- Object
- Static
- Final

11. APK stands for -
- Android Phone Kit
- Android Page Kit
- Android Package Kit
- None of the above

12. How many types of constructors available in Kotlin?
- One
- Two
- Three
- Four

13. What is the use of data class in Kotlin?
- extract the basic data types
- delete the basic data types
- present the basic data types
- holds the basic data types

14. Is there any Ternary Conditional Operator in Kotlin like in Java?
- TRUE
- FALSE
- Can be true or false
- Cannot say

15. What is the syntax for declaring a variable as volatile in Kotlin?
- var x: Long? = null
- Volatile var x: Long?
- Volatile var x
- Volatile var x: Long? = null

16. Elvis Operator is used for handling null expectations in Kotlin
- TRUE
- FALSE
- Can be true or false
- Cannot say

17. All classes in Kotlin classes are by default?
- public
- sealed
- abstract
- final

18. Kotlin was developed by?
- IBM
- NetBeans
- JetBrains
- Oracle

19. What does API stand for?
- Application Programming Interface
- Android Programming Interface
- Android Page Interface
- Application Page Interface

20. Kotlin is a statically-typed programming language which runs on the?

- JCM
- JVM
- JPM
- JDM

21. Which file extension is used to save Kotlin files?
- .java
- .kot
- .kt
- .kotlin

22. Does Kotlin support primitive Datatypes?
- Yes
- No
- Can be yes or no
- Can not say

23. What is an immutable variable?
- A variable that can be changed
- A variable used for string interpolation
- A variable that cannot change, read-only
- None of the above

24. . _____ helps to iterate through a range.
And operator
- Ranges operator
- Or operator
- Conditional operator

25. Kotlin is interoperable with Java because it uses JVM bytecode.
- Yes
- No
- Can be yes or no
- Can not say

DIPLOMA IN COMPUTER APPLICATIONS (DCA)
ANSWER KEY

1. an operating system
2. Apache/MIT
3. Class Subclass: Superclass
4. Mobile devices
5. Dalvik virtual machine
6. Object method ()

7. Class
8. Interface

9. Java

10. Object

11. Android Page Kit
12. Two
13. holds the basic data types
14. FALSE
15. Volatile var x: Long? = null
16. TRUE
17. final
18. JetBrains
19. Application Programming Interface
20. JVM
21. .kt
22. No
23. A variable that cannot change, read-only
24. Ranges operator
25. Yes

STUDENTS NAME: R. ELACKIYA [II. B.Sc MATHS] DURATION: 30 Min
SUBJECT CODE: 21CSVAAADWK   MAX MARKS: 50

ANSWER ALL QUESTIONS

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   - C++
   - C
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10. What is the keyword used to define a singleton class in Kotlin?
    - Singleton
    - Object
    - Static
    - ⦿ Final
11. APK stands for -
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15. What is the syntax for declaring a variable as volatile in Kotlin?
    - var x: Long? = null
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- Android Page Interface
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- JVM
- JPM
- ⊙ JDM ✗

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And operator
- Ranges operator
- ⊙ Or operator ✗
- Conditional operator

25. Kotlin is interoperable with Java because it uses JVM bytecode.
- ⊙ Yes
- No
- Can be yes or no
- Can not say

STUDENTS NAME: R. PARVATHI [III - MICRO - BIO].
SUBJECT CODE: 21CSVAAADWK

DURATION: 30 Min
MAX MARKS: 50

ANSWER ALL QUESTIONS

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   - Abstract
   - Class
   - Object
   - **Interface** ✓

9. Android is based on which of the following language?
   - **Java** ✓
   - C++
   - C
   - None of the above

10. What is the keyword used to define a singleton class in Kotlin?
    - Singleton
    - **Object** ✓
    - Static
    - Final

11. APK stands for -
    - Android Phone Kit
    - Android Page Kit
    - **Android Package Kit** ✓
    - None of the above

12. How many types of constructors available in Kotlin?
    - **One** ✓
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    - delete the basic data types
    - present the basic data types
    - **holds the basic data types** ✓

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    - **FALSE** ✓
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STUDENTS NAME: R. NIVETHINI [III. B.Sc, CS] **DURATION: 30 Min**
SUBJECT CODE: 21CSVAAADWK **MAX MARKS: 50**

ANSWER ALL QUESTIONS

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- Class
- Object
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ARPUTHA COLLEGE OF ARTS AND SCIENCE - VAMBAN
(Affiliated to Bharathidasan University - Tiruchirappalli)
DEPARTMENT OF COMPUTER SCIENCE
CERTIFICATE COURSE (2021–2022)
ANDROID APPLICATION DEVELOPMENT WITH KOITLIN
Students Mark List

SL.NO	STUDENT NAME	REG. NO	DEPARTMENT	TOTAL MARKS	MARKS SECURED
1	M.FLORA	CB20C70827	II-BCOM	50	48
2	A.JENITTA	CB20C70828	II-BCOM	50	48
3	M.KAVIYA DHARANI	CB20C70829	II-BCOM	50	49
4	M.SINDHU	CB20C70835	II-BCOM	50	50
5	B.SUBHASHINI	CB20C70837	II-BCOM	50	49
6	S.AMALA CHINNA RANI	CB19S193451	III-CS	50	47
7	P.KASTHURI	CB19S193456	III-CS	50	48
8	R.NIVETHINI	CB19S193462	III-CS	50	34
9	R.ABIRAMI	CB20S199435	II-CS	50	47
10	J.EBIBANIYA	CB20S199440	II-CS	50	49
11	V.FEVIN SANTHAYEE	CB20S199441	II-CS	50	50
12	A.FENCY FLORA	P21272325	I-M.SC (CS)	50	47
13	A.MOUNIKA	P21272326	I-M.SC (CS)	50	49
14	A.RAJALAKSHMI	P21272327	I-M.SC (CS)	50	48
15	R.VIJAYALAKSHMI	P21272329	I-M.SC (CS)	50	48
16	S.ANTONYAMMAL	P20273101	II-M.SC (CS)	50	50
17	M.SAHAYA DAISY	P20273103	II-M.SC (CS)	50	49
18	K.THULASIMANI	P20273104	II-M.SC (CS)	50	48
19	S.VETRISELVI	P20273105	II-M.SC (CS)	50	49
20	R.ELACKIYA	CB20S378203	II- B.SC (MATHS)	50	40
21	V.MAHADEVI	CB20S378205	II -B.SC (MATHS)	50	46
22	S.MESMIN STEPHY	CB20S378206	II- B.SC (MATHS)	50	47

23	S.POORANAM	CB20S378207	II -B.SC (MATHS)	50	38
24	K.SINDHU	CB20S378209	II -B.SC (MATHS)	50	46
25	U.ELIZABETH PENIKINA	P20193101	II-M.SC (MATHS)	50	39
26	S.KALAIVANI	P20193102	II-M.SC (MATHS)	50	47
27	R.LOURDHU MARY	P20193103	II-M.SC (MATHS)	50	46
28	J.MARIYANNAL	P20193104	II-M.SC (MATHS)	50	45
29	P.MEENA	P20193105	II-M.SC (MATHS)	50	50
30	V.DEVADHARSHINI	P21192326	I-M.SC (MATHS)	50	50
31	K.RAMYA	P21192334	I-M.SC (MATHS)	50	48
32	M.SANGAVI	P21192336	I-M.SC (MATHS)	50	50
33	T.KALEESWARI	CB21S381672	I-B.SC (MATHS)	50	39
34	M.MADHINA	CB21S381673	I-B.SC (MATHS)	50	47
35	R.PARVATHI	CB19S410553	III-B.SC MB	50	44
36	S.POTHUMPONNU	CB19S410555	III-B.SC MB	50	39
37	S.PRAVEENA	CB19S410556	III-B.SC MB	50	47
38	M.RUTHRADEVI	CB19S410559	III-B.SC MB	50	48
39	P.THAMIZHINI	CB19S410562	III-B.SC MB	50	47
40	J.SNEKA	CB20S411796	II-B.SC MB	50	46
41	S.SUBITHA	CB20S411798	II-B.SC MB	50	38
42	R.VINOTHINI	CB20S411800	II-B.SC MB	50	46
43	F.MONIKA	CB21S412897	I- B.SC MB	50	47
44	V.POTHUM PONNU	CB21S412900	I- B.SC MB	50	45

HEAD OF THE DEPARTMENT
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ARPUTHA COLLEGE OF ARTS AND SCIENCE
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PRINCIPAL
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