Section – A

9X2=18

I. Answer any NINE of the following Questions.

1. List out the characteristics of virtualization.
2. Mention any 2 challenges of x86 Processor.
3. Name the file type that makes a virtual machine.
4. What are the advantages of vHDD?
5. Draw a neat sketch of producer consumer role in PaaS.
6. What is the minimum system requirements to install ESXi Server?
7. List out the top 5 cloud service providers name.
8. Define SLA.
9. What are the obstacles for cloud Technology?
10. Enumerate the various career opportunities for cloud computing learnt professionals.
11. Is virtualization and cloud computing one and the same? Justify.
12. Define S3, EC2 and VPC used in AWS.

Section – B

II. Answer any SEVEN of the following Questions.

7X4=28

1. Write Short notes on Application and Operating System Virtualization.
2. Give a short note on Key Benefits of Virtual Machines.
3. Draw an appropriate diagram and explain type 1 and 2 hypervisors.
4. What is virtual hard disk and its usage? Write down the steps to create VHD in Microsoft Operating system.
5. What is VM Migration? Also explain the characteristics of OVF file format.
6. Write a brief note on Merits and Applications of Cloud Computing.
7. Draw neat diagram and explain Four Types of Cloud (Deployment Models).
8. What you mean by assessing the cloud? Explain the steps associated with assessing the cloud.
9. Write short notes on Cost Benefit Analysis in cloud computing.
10. Explain how to take a virtual copy of your physical system using Hyper-V.

Section – C

III. Answer any THREE of the following Questions.

3X8=24

1. Write down the steps to install 2 VMs and establish connection among VMs & Base Machine, check their connectivity using ping command. List out and explain the different types of vSwitch connections to establish communication.
2. Compare different types of Cloud Services (IaaS, PaaS, SaaS) with appropriate examples.
3. Discuss about Cloud Cost Management and Selection of Cloud Provider in a better business strategic way.
4. Discuss about the obstacles for cloud technology, Cloud vulnerabilities, Cloud challenges.
5. Write short notes on:
   a. Interoperability, Portability and Integration
   b. Brief about Leading Cloud Service Providers and their Cloud Services.

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JAIN UNIVERSITY

Preparatory Examination, March – 2018

IV Semester BCA [ISMA/MACT]

ANDROID OPERATING SYSTEM [16BCA4CD31]

JGI

19-March-2018
Monday
09:30AM to 12:30PM

Max Marks: 70

Time 3 Hours

Section – A

I.   Answer any NINE of the following questions.   9X2=18

1. Where can you put all the string values of a project be put for maintaining the programming structure?
2. How to handle with different screen size icons in android?
3. Where can the version name of our applications be given?
4. Differenciate between onPause() and onStop() ?
5. Define Absolute layout. How it is different from Relative layout?
6. How can emulator be created in android studio?
7. Why do we use Wrap Content and Match Parent features in building views?
8. What acts as a bridge between .xml and .java file in Android?
9. What is gradle?
10. What you can find in. apk file and how it is created in android?
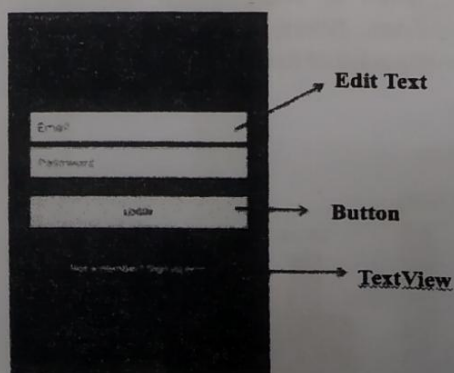11. Define Sensors.

Section – B

II.   Answer any SEVEN of the following questions.   7X4=28

1. How many ways can listener of a button can be created?
2. What is a Fragment?
3. Why we need values folder in Android?
4. How does Android Manifest file play a vital role in building android application?
5. Differenciate between DVM and JVM.
6. What is a Fragment?
7. What is the Resource folder, and what it is used for?
8. Write the differences between implicit and explicit intent? Email
9. Write a short note on AndroidManifest.xml?
10. Explain Shared Preferences.

Section – C

III. Answer any THREE of the following questions.   3X8=24

1. Explain different components of Android Architecture.
2. How does sqlite help in storage in Android application development.
3. What are different types of layouts used for Android application development?
4. Describe Content Provider with proper example.
5. Design this UI (XML code) :

Edit Text

Email

Password

Button

LOGIN

TextView

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JGI

JAIN UNIVERSITY
Preparatory Examination, March – 2018
IV Semester BCA [ISIM]
Installation and Configuration of Server [16BCA423D32]

20-March-2018
Tuesday
09:30AM to 12:30PM

Time 3 Hours

Max Marks: 70

Section – A

I. Answer any NINE of the following questions.   9X2 = 18

1. Write down the post installation tasks to be completed on Windows Server 2012.
2. What is migrating roles and what are all the suitable conditions for migration?
3. Write down the Windows Disk Settings.
4. What are all the additional settings available while creating a Folder Share in Windows Server 2012?
5. What is the sharing strategy of files?
6. What are all the approaches of permission management?
7. Define NTFS authorization.
8. Draw the configuration of network-attached printing and network-attached printer sharing.
9. List out the default filters for viewing printers.
10. What are the components of Windows print architecture.
11. Mention the functions of guest integration services.
12. What are all the performance metrics calculated by resource metering?

Section – B

II. Answer any SEVEN of the following questions.   7X4=28

1. What are all the differences between Windows server 2012 editions?
2. Describe the process of configuring NIC teaming.
3. Compare the volume types: Simple, Stripped, Spanned, mirrored and RAID 5.
4. Explain the process of creating and mounting Virtual Hard Disk.
5. Write a note on inheriting permission and preventing inheritance with a neat diagram.
6. How will you provide effective access for your file or folder and what are all the rules to be imposed for an effective access?
7. Briefly explain the following components of Windows Print Architecture:
   a) Print device
   b) Printer
   c) Print server
   d) Printer driver
8. Write down the method for managing documents & printers.
9. How will you install Hyper-V?
10. Write down the steps for modifying virtual disks in Hyper-V.

Section – C

III. Answer any THREE of the following questions.   3X8=24

1. Explain in detail about the following process in Command Line Interface (CLI) & Graphical User Interface (GUI) :
   a) Adding roles and features
   b) Adding server
2. How will you create a storage space on Windows Server 2012?
3. Describe the process of creating folder shares in detail.
4. How will you configure print and document service using the print & document services role.
5. Explain in detail about the process of connecting to a Storage Attached Network (SAN).

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JAIN UNIVERSITY

JGI

Preparatory Examination, March – 2018

IV Semester BCA [MACT]

ELEMENTS OF INSTALLATION AND
CONFIGURATION OF SERVER [16BCA45C01]

20-March-2018
Tuesday
09:30AM to 12:30PM

Max Marks: 70

Time 3 Hours

Section – A

9X2 = 18

I. Answer any NINE of the following questions.

1. Write down the post installation tasks to be completed on Windows Server 2012.
2. What is migrating roles and what are all the suitable conditions for migration?
3. List out the storage layout available while creating virtual disks.
4. What are all the additional settings available while creating a Folder Share in Windows Server 2012?
5. What is the sharing strategy of files?
6. What are all the approaches of permission management?
7. Define NTFS authorization.
8. Draw the configuration of network-attached printing and network-attached printer sharing.
9. List out the default filters for viewing printers.
10. What are the components of Windows print architecture?
11. Mention the functions of guest integration services.
12. What are all the performance metrics calculated by resource metering?

Section – B

II. Answer any SEVEN of the following questions.

7X4=28

1. What are all the differences between Windows server 2012 edition?
2. Describe the process of configuring NIC teaming.
3. Compare the RAID types: RAID0, RAID1, RAID0+1, RAID1+0, RAID2, RAID 3, RAID4 and RAID5.
4. Explain the process of creating and mounting Virtual Hard Disk.
5. Write a note on inheriting permission and preventing inheritance with a neat diagram.
6. How will you provide effective access for your file or folder and what are all the rules to be imposed for an effective access?
7. Briefly explain the following components of Windows Print Architecture:
    a) Print device
    b) Printer
    c) Print server
    d) Printer driver
8. Write down the method for managing documents & printers.
9. How will you install Hyper-V.
10. Write down the steps for modifying virtual disks in Hyper-V.

Section – C

III. Answer any THREE of the following questions.

3X8=24

1. Explain in detail about the process of configuring NIC teaming.
2. How will you create a storage space on Windows Server 2012?
3. Describe the process of creating folder shares in detail.
4. How will you configure print and document service using the print & document services role.
5. Explain in detail about the process of connecting to a Storage Attached Network (SAN).

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Section – A

I. Answer any NINE of the following questions.   9X2 = 18

1. Define double implication and write its truth table.
2. Find the contrapositive of the statement: 'If the train leaves then the passengers will arrive.'
3. What are quantifiers. List the different types of quantifiers.
4. Define infinite sets and give example.
5. State the Pigeon Hole principle.
6. How many subsets of a set A={1,2,3} have 2 elements?
7. Define one-one function with example.
8. Check whether the relation R={(1,1), (2,2), (3,3)} defined of the set A={1,2,3} is reflexive. Give reasons for your answer.
9. List the properties to be satisfied by a set for it to be group.
10. Is the set of integers a group under multiplication? Give reasons for your answer.
11. Write the recursive form of the Fibonacci series.
12. State the theorem of mathematical induction.

Section – B

II. Answer any SEVEN of the following questions.   7X4=28

1. Find the negation of the logical statement: $[p(x) \rightarrow q(x)] \wedge [p(x) \vee r(x)]$ where $x \in R$
2. Symbolise the following statement and find its negation:
   'If all triangles have three sides then some squares are rectangles.'
3. How many words can be formed with the letters of the word 'TRIANGLE', such that the words begin with 'N', but do not end in 'R'?
4. Prove the following identity using membership table:
   A U (B ∩ C) = (A U B) ∩ (A U C)
5. Check whether the function $f(x) = x^2+1$ is bipartite.
6. Prove that $1+2+3+...+n = n(n+1)/2$ using mathematical induction.
7. Let S is a subset of positive integers with 49 elements. Show that S contains two elements that have the same remainder when divided by 48.
8. Obtain the recursive definition of the sequence $a_n=2-(-1)^n$.
9. Check whether Z_6 is an abelian group under addition modulo 6.
10. Explain the importance of statistics in computer science.

Section – C

III. Answer any THREE of the following questions.   3X8=24

1. Define implication. Find the converse, inverse and contrapositive of the following statement:
   'If she passes in Mathematics, the professor will resign and the college will close'.
2. In how many ways can six boys and six girl be seated in a row if
   1) anybody can sit next to one another
   2) all boys are seated together and all girls are seated together
   3) boys and girls occupy alternate seats
   4) boys occupy extreme seats
3. Define equivalence relation. Check whether the following set R = {(1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3)} defined on the set A={1,2,3}, is an equivalence relation.
4. How many numbers between 1 and 286 are divisible by 2 or 3 or 7?
5. State and explain the rules of mathematical induction.

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JAIN UNIVERSITY

17-March-2018
Saturday
09:30AM to 12:30PM

Preparatory Examination, March – 2018

I U Semester BMS / BCA

COMMUNICATIVE ENGLISH

Max Marks: 70

Time 3 Hours

SECTION - A

1. Shan decides to work for two years after the completion of his graduation, but his father insists on higher education. He tries to convince his father about his thoughts. Develop a dialogue between both of them taking five turns each. **10 Marks**

OR

2. Write a speech on any one of the following topics: **10 Marks**
   a) College network should have filters to prevent access of inappropriate materials.
   b) Cell phone use and texting cause lower levels of concentration and focus.

3. Write an Appropriate response for two of the following situations. **2x5=10**
   a) Your friend is unable to make it for dinner at your place. She sends an apology text over the phone.
   b) You are at an interview. The interviewer asks you: "When was the last time you accomplished something great?"
   c) Your tenants have informed you to fix a problem in the apartment. You won't be able to as you are out of station.
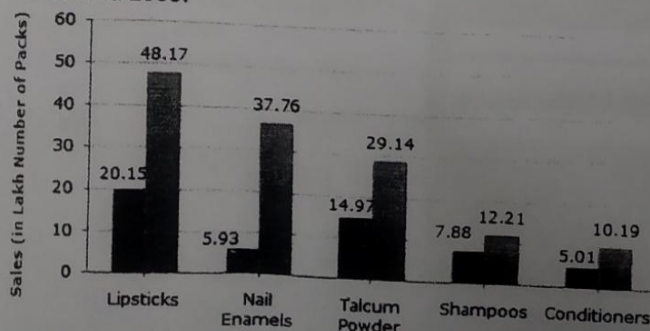
Section B

4. Complete the following passage with appropriate words : **10 Marks**

   Speaking in public is a ………(1)…….as its other forms like singing, writing or acting are. The speaker is required to be careful or rather more …(2)…….. because one of its most important requirement is to appear ……(3)………… to the audience. In ancient times, the great speakers used to prepare their speeches before a ……(4)….. of their known persons and noticed their own ………(5)……… and ……(6)………… of the spectators. Their audience ………(7)………. their trusted friends, critics and mentors. They repeated their speech a number of times in order to make ……(8)……over their words, speech and way of speaking. This made their speaking perfect and …….(9)………and also made their way of speaking perfect and …..(10)………. This all appeared not only highly perfect product but also a genuine way of expression. This is the reason that we still study the speeches of great men to gain experience and perfection in our acts of speaking in public more efficiently and flawlessly.

Section C

5. A cosmetic company provides five different products. The sales of these five products (in lakh number of packs) during 1995 and 2000 are shown in the following bar graph. Summarize the information by selecting and reporting the main features and make comparisons where relevant. (Word limit: 250 words) **5 Marks**

Sales (in lakh number of packs) of five different products of Cosmetic Company during 1995 and 2000:

6. **Make notes for the following passage with a suitable title:** 10 M

The tests of life are its plus factors. Overcoming illness and suffering is a plus factor for it moulds character. Steel is iron plus fire, soil is rock plus heat. So lets include the plus factor in our lives.

Sometimes the plus factor is more readily seen by the simple hearted. Myers tells the story of a mother who brought into her home – as a companion to her own son- a little boy who happened to have a hunch back. She had warned her son to be careful, not to refer to his disability. The boys were playing and after a few minutes she overheard her son say to his companion " Do you know what you have got on your back ?" The little boy was embarrassed, but before he could reply, his playmate continued " It is the box in which your wings are, and some day God is going to cut it open and then you will fly away and be an angel."

Often it takes a third eye or a change in focus, to see the plus factor. Walking along the corridors of a hospital recently where patients were struggling with fear of pain and tests, I was perturbed. What gave me a fresh perspective were the sayings put up everywhere, intended to uplift. One saying made me conscious of the beauty of the universe in the midst of pain, suffering and struggle. The other saying assured me that God was with me when I was in deep water and that no troubles would overwhelm me.

The import of those sayings also made me aware of the nether springs that flow into people's lives when they touch rock bottom or are lonely or guilt ridden. The nether springs make recovery possible, and they bring peace and patience in the midst of negative forces.

The forces of death and destruction are not so much physical as they are psychic and psychological. When malice, hatred and hard heartedness prevail, they get channeled as forces of destruction. Where openness, peace and good heartedness prevail, the forces of life gush forth to regenerate hope and joy. The life force is triumphant when love overcomes fear. Both fear and love are deep mysteries, but the effect of love is to build, whereas fear tends to destroy. Love is generally the plus factor that helps build character. It creates bonds and its reach is infinite.

It is true there is no shortage of destructive elements – forces and people who seek to destroy others and in the process destroy themselves – but at the same time there are signs of love and life everywhere that are constantly enabling us to overcome setbacks. So let's not look at gloom and doom – let us seek positivity and happiness. For it is when you seek that you will find what is waiting to be discovered

7. **Write a brief analysis for the following advertisement :** 10 M

Spare parts
for humans
are not
as original as
those for cars.

Don't Drink and Drive.

OR

8. Script Writing (A minimum of 5 scenes to be developed):
   10 Marks
   Imagine two characters who wouldn't normally interact with each other. Now place them in a situation where they unexpectedly cross paths. Perhaps they meet at a rest stop by the highway. Perhaps one calls the other by dialling a wrong number. What might they talk about? This same scenario can also be compelling with two characters who've been avoiding each other.

Section D

9. As a recent buyer of their car, write an E-mail to the Manager of Smart automotive company, Mr. Ahmed, regarding the poor quality of service facility available in the city. Sign in as Mr. Chopra.
   5 Marks

10. Draft an application in response to the following advertisement: **10 Marks**
    HQC Financial is a market leader in providing innovative financial product platforms. The Enterprise Services division is looking for an experienced problem-solver with a high level of technical knowledge to work on a range of business banking applications.

    In this systems analyst role you will become part of a large team working to meet the needs of both internal departments and external clients.

    You will need:
    ➢ An IT degree and up-to-date knowledge of operating systems
    ➢ At least three years' experience working in systems analysis, preferably in the financial services sector
    ➢ Experience in designing IT-led operational solutions utilising a range of computer systems
    ➢ Strong communications skills including experience in writing business requirements, user cases and flow charts
    ➢ Capable of working autonomously and as part of a team
    ➢ Ability to problem-solve and conduct robust testing throughout system deployment
    ➢ Good organisational skills and attention to detail

This role represents a great opportunity to join a respected team in the business end of the financial services industry. If you are interested and meet the selection criteria, please send your resume and cover letter to:
The HR Manager, HQC Financial, M.G Road, Bangalore-01
hrmanager.HQCF@email.com.

OR

Write an essay on the following topic: **10 marks**
Sports should be made compulsory course in higher learning institutions.

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