EXAMINATION QUESTION PAPER
PG-DAC SEPT 2021

Module Name : SDM

DATE: 30 / 01 / 2022　　　　　　**Duration:** 3 hrs.　　　　　　**Max. Marks:** 40

INSTRUCTIONS:

1. All questions are mandatory.
2. This exam is of 40 marks where, **Q1 – Q5 consists of 6 marks each and Q6 consists of 10 marks**.
3. Write all answers in a document in sequential order starting from 1 to 6 neatly.
4. Write all answers in a precise manner and attach links and screenshots, if required.
5. Attach all links and screenshots against appropriate question, if required.

❖ Create one folder on your machine rename it with your PRN (Please use complete PRN)
❖ Copy all the solution files + links + screenshots of all questions in the above created folder (PRN named folder).
❖ After copying all the files right click on main folder select option "Add to Archive" and click on radio button in front of <u>zip option</u>.
   It will create zip folder of your PRN. This will be your final folder to upload.

- Please note before uploading zip folder make sure you have copied all your relevant files in the respective folders. Once you upload the final folder you will not be able to re upload it
- Kindly ensure before creating zip file, make sure all the required files should be closed to avoid any corruption of the zip file.
- Zip File should be renamed with FULL PRN No. of the candidate
  (For example: For PRN 1 : 210940120001.zip)

QUESTIONS :

1. Create a Github repo with name devops-<PNR> and share steps as well as repo link.

   [6 Marks]

2. Clone the repo created in above question. add some java code and push it to Github repo.
   Provide all steps to push newly developed code to Github repo and provide commit number.

   [6 Marks]

3. Create a docker swarm cluster (2 or 3 nodes), run service of httpd, scale it on all nodes.
   Share steps and screenshot of terminal showing httpd service is running with all replicas.

   [6 Marks]

4. List all the docker images and container created in Q3 and remove a running container on any node.
   Share all steps and screenshots.

   [6 Marks]

5. Using codenvy to run any java program - you may write any java program of your own choice?

   [6 Marks]

6. Create a Jenkins pipeline to pull the Github repo create in 1st question add build steps ,compile the code . Manually trigger Jenkins pipeline.Submit steps and screenshot that will show successful build and output of java code?

   [10 Marks]

***************************** **ALL THE BEST** *****************************