

IPCC – November 2017

INFORMATION TECHNOLOGY

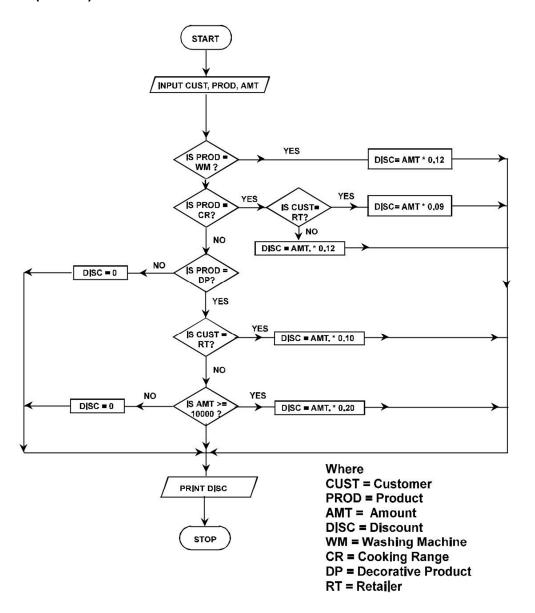
Test Code -

Branch (MULTIPLE) (Date: 02.07.2017)

(50 Marks)

Note: All questions are compulsory.

Question 1 (6 marks)



Question 2 (6 marks)

Let us define the variables first:

PM: Performance Marks,

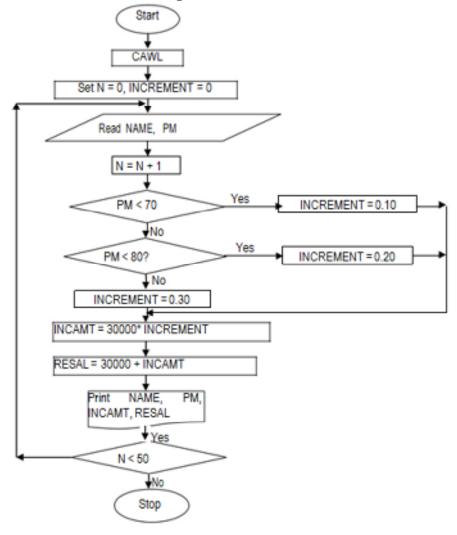
RESAL: Revised Monthly Salary,

INCAMT: Increment Amount,

NAME: Name of Engineer,

N: Pointer to track number of Engineers

INCREMENT = 0.



Question 3(6 marks)

- (i) <u>iPad</u>: The iPad runs a version of iOS. iOS is designed for finger based use and has none of the tiny features which required a stylus on earlier tablets. Apple introduced responsive multi touch gestures, like moving two fingers apart to zoom in. iOS uses less power, and so gives better battery life than the Intel devices used by Windows tablets. (3 marks)
- (ii) <u>Ultra Mobile PC (UMPC)</u>: An Ultra-Mobile PC is a small form factor version of a pen computer, a class of laptop whose specifications were launched by Microsoft and Intel in spring 2006. UMPCs are smaller than subnotebooks, have a TFT display measuring (diagonally) about 12.7 to 17.8 cm (5 to 7 inches screen), are operated like tablet PCs using a touch screen or a stylus, and can also have a physical keyboard. (3 marks)

Question 4(6 marks)

Delivery channels refer to the mode through which information or products are delivered to users. (1 mark)

Delivery Channels for Information include the following:

- Intranet: Network within the company/enterprise;(1 mark)
- E-mail: The most widely used delivery channel for information today; (1 mark)
- Internal newsletters and magazines; (1/2 mark)
- Staff briefings, meetings and other face-to-face communications methods; (1/2 mark)
- Notice boards in communal areas; (1/2 mark)
- Manuals, guides and other printed resources; (1/2 mark)
- Hand-held devices (PDAs, etc.); and(1/2 mark)
- Social networking sites like Facebook, WhatsApp etc. (1/2 mark)

Question 5(6 marks)

Online Processing: In this, data is processed immediately while it is entered, the user usually only has to wait a short time for a response. (Example: games, word processing, booking systems). Interactive or online processing requires a user to supply an input. Interactive or online processing enables the user to input data and get the results of the processing of that data immediately. (3 marks)

<u>Real-time Processing</u>: Real time processing is a subset of interactive or online processing. Input is continuously, automatically acquired from sensors which are processed immediately in order to respond to the input in as little time as possible. The system doesn't need a user to control it. Real time processing is used in warning systems on aircraft, alarm systems in hazardous zones, burglar alarms etc. **(3 marks)**

Question 6 (5*4=20 marks)

Write short notes on

- (a) MS Office Applications: These are various office automation systems made available by Microsoft Corporation which include MS Word, MS Excel, MS PowerPoint, MS Access, etc. Each of these software help to achieve automation of various tasks in the office. It has features such as customized ribbon, backstage view, built-in graphics toolset, enhanced security, excel spark lines, pivot for Excel, PowerPoint broadcast, Power Point compression, paste, preview and outlook conversation view.
- (b) Business Process Management-Life cycle establishes a sustainable process management capability that empowers organizations to embrace and manage process changes successfully. Because it incorporates both human resources and technology—culture, roles and responsibilities, as well as data content, applications and infrastructure—the approach enables fully informed decision-making right across an organization. Phases are Analysis, Design, Implementation, Run & Monitor and Optimize.
 - a. **Analysis phase:** This involves analysis of the current environment and current processes, identification of needs and definition of requirements.
 - b. **Design phase:** This involves evaluation of potential solutions to meet the identified needs, business process designing and business process modeling.
 - c. **Implementation phase:** This involves project preparation, blue printing, realization, final preparation, go live and support.
 - Run and Monitor phase: This involves business process execution or deployment and business process monitoring.
 - e. **Optimize:** Iterate for continuous improvement.
 - (c) **Android:** Android is a Linux-based operating system designed primarily for touch screen mobile devices such as smart phones and tablet computers. Android is an open source and the permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Android provides access to a wide range of useful libraries and tools that can be used to build rich applications.

(d) WhatsApp Messenger: It is a cross-platform mobile messaging application which allows us to exchange messages without having to pay for SMS. It is available for iPhone, BlackBerry, Android, Windows phone, Nokia and these phones can message each other. Because WhatsApp Messenger uses the same internet data plan that we use for e-mail and web browsing, there is no cost to message and stay in touch with friends.
