# Latest Government Jobs Notifications as on 17.6.2016

| Organization | Post Name - No of Vacancies | Last Date for Apply |
|---|---|---|
| BNPM India | Graduate Apprentice - 30 | 30/06/2016 |
| Currency Note Press Nashik | Supervisor (R&D) - 16 | 30/06/2016 |
| Mazagon Dock Limited (MDL) | Various Managers, Senior Engineers - 15 | 30/06/2016 |
| IIT Bombay | Technical Officer, Training and Placement Officer - 03 | 20/06/2016 |
| ITI Limited | Contract Engineer | 25/06/2016 |
| ICSSR | Engineer (Civil / Electrical) - 01 | 25/06/2016 |
| NMML | Assistant Administrative Officer-cum-Engineer - 01 | 25/06/2016 |
| Bharat Electronics Limited (BEL) | Deputy Engineer (D&E) - 01 | 22/06/2016 |
| Delhi Metro Rail Corporation (DMRC) | Assistant Manager & Junior Engineer - 114 Posts | 27-06-2015 |

# 📚 Book Expo 📚



Books are our best friends, guiders and philosophers. Books uphold and encourage us when we feel sad and despondent. They bring light into darkness and the sunshine into shadow. When you read a book, its feels great to put yourself into a world the writer has created for you The habit of reading good content daily will act as an exercise for our mind and keep us mentally fit and flexible. Reading a book is not like that you read a book in English that is in any language which you feel comfortable. If you have never given it a try then always remember that it's never too late to start a good habit. To inculcate this habit in the students, The Department of MCA conducted an Event called Book Expo under VISTA Department association.

The main aim of organizing this event is to create an awareness among students that enforces importance of book, and to provide a platform for students to exchange books, the event consists of 2 segments Book-fair and Handi-craft Expo. The event was organized on 2nd, April 2016, the students were announced about the event a week before, the event started at 10:00 AM. The Book exhibition was inaugurated by dynamic

HOD Dr. V. Ilango, presided by Prof. A.P Nirmala and Prof. Kavitha S.N who were the faculty coordinators. In the event the following resources were showcased.

To encourage the spirit of human values a copy on "A Life on Swamy Vivekananda" was distributed free to all the visitors which made a good impact on book culture followed from ancient times by the great people.

The event received a over whelming response from the student community as more than 100 students registered as a participants and encouraged us by viewing a lot of books also most of them had ideas to take it away as a result more books were exchanged.

| | |
|---|---|
| Books | 126 |
| e-Books | 67 |
| Handicrafts | 116 |
| Miscellaneous | 20 |

Abdul Afsar Baig W 2nd
**sem MCA**

# Best Paper Award March 16-18, 2016



Mr. Nagraju Kilari, Head of the Department, BCA received Best Paper award for his paper The Performance Analysis of N-S Architecture to Mitigate DDOS Attack in Class Environment in the 10th INDIA Com-2016 International Conference held in Bharati Vidyapeeth Institute of Computer Applications and Management(BVICAM) from March 16-18, 2016 in New Delhi.

# Report On National Conference-May 2016



The Department of Electronics and Communication conducted a National Conference titled TechXellence-2016 on 5th May 2016. The conference was well attended by eminent academicians, faculty members and students from reputed educational institutions.

About 46 papers were presented in four technical sessions under four different categories titled VLSI Design, VLSI & Embedded Systems, Image Processing and Communication Systems & Networking.

The conference was inaugurated by the Chief Guest at the inaugural function, Mr.Shivanand Kamath, Sr.Engg Manager, Si2chip Tech Pvt. Ltd. by lighting the lamp followed by an invocation dance by students of NHCE. He shared his views on various topics related to the recent trends in Electronics and communication. The inauguration was soon followed by the address of Dr. Sanjay Jain, HOD of ECE Department and Convenor of the National Conference and Dr. Manjunatha, Principal, NHCE. The Conference Proceedings CD was released by the Chief Guest on the occasion. The technical session that followed the inaugural function was chaired by Prof. Mallikarjuna, Associate Professor, City Engineering College, G.S Prof. Rajesh N, Associate Professor, Nitte Meenakshi Institute of Technology and Dr. Mohan Kumar Naik, Dr. Nisha KCR, Prof. Aravinda

K, Prof. Lipsa Dash, Prof. Divya Sharma, Prof . Ishani Mishra of New Horizon College of Engineering, Bangalore.

The Conference ended with the vote of thanks. The winners were declared and certificates to the participants too were given away. Vidyashree of NHCE won the first prize for "Analysis and Improvements in Heterogeneous Wireless Sensor Networks against Fault- Tolerance in Distributed Environments". The Second prize was awarded to Thasrin Banu S , Soumya Sangalad Swathi of Oxford college of Engineering for "Elliptical Curve Cryptography by Vedic Mathematics" and the third prize was given to Aravind R Menon , Saransh Kumar ,Aritra Debnath of NHCE for " Design of Ultrasonic Radar for Short Range Object Detection"

After the valedictory program, high tea was served and the conference was concluded. It left fond memories in the minds of the guests and delegates, and a great sense of satisfaction
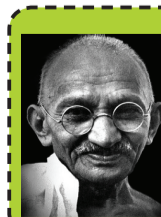


and accomplishment in all faculty members and student volunteers who were associated with its preparation and organization over a period of three months.

Dhermesh Manghnani
II Sem BBA, NHCM

## Open Forum

A life not lived for others is not a life.
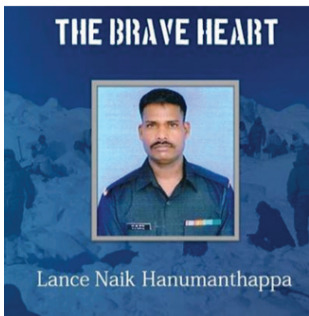**Mother Teresa**

**" Quote Hanger**
The difference between what we do and what we are capable of doing would suffice to solve most of the world's problems.

**Mahatma Gandhi**

# Lance Naik Hanumanthappa Koppad, The Survivor



THE BRAVE HEART
Lance Naik Hanumanthappa

The soldiers that didn't come back were the heroes. It's a roll of the dice. If a bullet has your name on it, you're a hero. If you hear a bullet go by, you're a survivor. LANCE NAIK HANUMANTHAPPA KOPPAD was the Only man survived. His struggle for life inspired us all, Maybe it was luck, maybe it an air pocket, maybe it was his fitness and toughness. His fight for life showed India the value of every jawan's life, a rare phenomenon. Rarely has the nation come together to pray for an army man to live - this is the real 'Siachen Miracle'. He was rejected by the army thrice. Despite creating a new precedent for survival in the world's most inhospitable terrain without food, water and low oxygen level,. He hailed from Betadur village, Karnataka known for producing many such braves, giving him enough inspiration to continue. He Volunteered to fight in difficult areas instead of peacekeeping operations - Enrolled in 19th Battalion of Madras Regiment in 2002, he went on serve a decade in India's most toughest regions. His postings included Mahore (Jammu and Kashmir), involved in counter-insurgency operations between 2003 to 2006. He has served for 10 years in difficult and challenging areas out of his 13 years of service," A senior official told the media. Then, he volunteered for a posting with the 54 Rashtriya Rifles (Madras) in Jammu & Kashmir (2008-2010), fighting terrorism. After finishing this posting, he volunteered to fight terrorist outfits National Democratic Front of Bodoland and United Liberation Front of Asom in the the north-east between 2010 to 2012. Soon after the news of his survival reached his village in Dharwad, Karnataka his father revealed that he named his son after the Hindu god Hanuman, so he triumphed death. Hanumanthappa was described by army personnel as "deeply religious", and a yoga expert. He used to not only practice yoga himself but also help fellow soldiers with their breathing exercises. Medical science can perhaps explain better but we believe yoga perhaps had a role to play in his being able to survive in those conditions.
Hence he was a brave man who survived for the country and now he is no more. Goodbye and salute, Lance Naik Hanumanthappa, you will live in our thoughts forever.

Abdul Afsar Baig.W
I MCA 'A' Sec

# Health Benefits of Yoga



1. Improves your flexibility
2. Builds muscle strength
3. Perfects your posture
4. Prevents cartilage and joint breakdown
5. Protects your spine
6. Betters your bone health
7. Increases your blood flow
8. Drains your lymphs and boosts immunity
9. Ups your heart rate
10. Drops your blood pressure
11. Regulates your adrenal glands
12. Makes you happier
13. Founds a healthy lifestyle
14. Lowers blood sugar
15. Helps you focus
16. Relaxes your system
17. Improves your balance
18. Maintains your nervous system
19. Releases tension in your limbs
20. Helps you sleep deeper
21. Boosts your immune system functionality
22. Gives your lungs room to breathe
23. Prevents IBS and other digestive problems
24. Gives you peace of mind
25. Increases your self-esteem
26. Eases your pain
27. Gives you inner strength
28. Connects you with guidance
29. Helps keep you drug free
30. Builds awareness for transformation
31. Benefits your relationships
32. Uses sounds to soothe your sinuses
33. Guides your body's healing in your mind's eye
34. Keeps allergies and viruses at bay
35. Helps you serve others
36. Encourages self care
37. Supports your connective tissue
38. Uses the placebo effect, to affect change

# NHC-M the proud National Winner of Stock MIND Season 4!

**Made by Uday Kumar G**



Uday Kumar G (VI-BBM Professional) of NHC-M wins StockMIND Season 4 the largest countrywide competition for college students educating them on stock market investments. The competition was held in 599 colleges with 181238 participants between August 14, 2015 to March 22, 2016.

# ALOHA
## THANKS GIVING & FAREWELL

It was an incredible day hosted and organized by class IV & II sem MCA students, to bid ALOHA (Farewell & Thanksgiving) for our seniors of VI sem MCA on April 30 2016 in the college auditorium. This is to wish them a great future.
The Program started at 11 O'clock, but before seniors enter the auditorium we collected their autograph and messages which made them very happy.
Then the event was started by Lighting of Lamp from the seniors and a melodious welcome song was sang by Chaithanya from IV sem MCA by praising the lord Ganesha.
Thenthe VISTA-2016 is an club activity of MCA Department which was conducted in 2015-2016, students who had participated and won the event was awarded with prize and certificates from the seniors and then the Sharath H.S from IV Sem was selected as the student Main Co-Ordinator and Abdul Afzar & Nidhi from II Sem was selected as VISTA Main Co-Ordinatorsand the Co-Ordinators for rest of



the club were selected and Prof Mrs.Kavitha was once again selected as the faculty Co-Ordinator of the VISTA Club.
Then Prof.Dr.V.Illango(HOD of MCA) in his speech wished good luck to the students of MCA III for their future and he also expressed his hope that all the students will continue holding top positions in future. All the teachers of the department gave their wishes and blessings to thestudents of MCA III.
Students of MCA I and II presented very entertaining group dance, solo dance and solo song performances. The audiences we very happy and encouraged the performances by giving a huge round of applause.

The highlight was the video which was presented by the students of MCA III for their friends which was most heart touching to everyone and bought tears of happiness in everyone's eyes.Some exciting games were also arranged for the students of MCA III and were enjoyed by all and had lots of fun.
A small gift was gifted to the students of MCA III as a token of love and appreciation by their juniors. In the last all seniors were brought to the dance floor and had a wonderful dance and enjoyed a lot on the day and finally a lunch was arranged to all the faculty members of the department and for all the students of the MCA.

Dept. of MCA: NHCE

# Enhance `16
## Conducted by:Department of computer MCA,NHCE Event date:26th April 2016



It makes me feel honoured to brief you that "VISTA"(Visualize,Innovate ,Systemize,Target,Achieve)-students forum department of computer applications ,NHCE Bangalore has been successful in conducting ENHANCE-16 with a state level IT FEST whose watch words being- "Exploring Hidden Talents" with this intention a hunt for the best talent was conducted in the MCA premises of the NHCE.



Inorder to find the best talent the event was organized on 26th of april with the chief-in-person Dr K Sateesh Vice Chairman CSI Bangalore Chapter,presided over by Dr Manjunatha ,principal NHCE who added the competative environment before the event took off.

The event started with the key-note address by the HOD who greeted the students with his best wishes,following which the chief-in-person made a public note on "cyber-security",which followed a flag off to the event.

Before the event commenced the department of MCA released its first public magazine titled "JNANA-VICHARA" which was formulated by Prof K meenakumari,which was unveiled by the chief-in-person At 10:00 as stated a set of 8 events started simultanously at various venues which included lab,class room etc.
Each event comprised of 2-Rounds where the students toiled hard to display there skills and to out-match their counter-parts.
The events such as Selfiegraphy,Quick

fingers received huge response which made the event more auspicious .
The entire day was full of competation for the participants as the events and its subsequent rounds were lined-up successively.every student had something to cheer about as suspense unrolled to its best.
The lunch were arranged for the participants at the boys Hostel which provided a sense of refreshment for all the participants as the final round of all the events were scheduled after lunch.
At 4:00 the valedictory ceremony commenced to name the winners of the event here suspense was at its peak as the students were in a bit-of-nervousness following which the winners were announced and they were felicitated by the chief-in-person and HOD.

The entire entire event was convened by prof.Krishna Chandra.M who also delivered the welcome speech aend also the Quote of thanks on behalf of the entire Department.

Sparkling moments:
The event was inaugurated by Dr.K.S Sateesh VC CSI Bangalore.
 20 colleges were seen as a participant college.
80 students enrolled into various events
The hype for the event was channelized through social networking sites such as Face Book,whats App,Hike etc.

The first department Magazine titled "Jnana Vichara"was unveiled in public forum.



Dept. of MCA: NHCE

# Go Green

Oh green! it's pity to see
you supressed and submerged.
Your path has become illusive,
destructed and grazed all over.
But wind is blowing in search of you,
rivers are rushing towards you,
birds are chirping to rest on you,
animals are wandering to feed on you.
Are humans finding to rebuild you?
Go green, go. Vast wide the earth,
to enlighten each one to plant one and
re-establish the garden city.

Sushmitha R
1Nh12is114
8Th Sem,ISE,Nhce

# Quantitative Aptitude  #4
## Problems on Partnership

1. A and B invest in a business in the ratio 3 : 2. If 5% of the total profit goes to charity and A's share is Rs. 855, the total profit is:

   **A.**  Rs. 1425     **B.**  Rs. 1500

   **C.**  Rs. 1537.50     **D.**  Rs. 1576

   **Answer:** Option **B**
   **Explanation:**
   Let the total profit be Rs. 100.
   After paying to charity, A's share = Rs. $\left(95 \times \dfrac{3}{5}\right)$ = Rs. 57.
   If A's share is Rs. 57, total profit = Rs. 100.
   If A's share Rs. 855, total profit = $\left(\dfrac{100}{57} \times 855\right)$ = 1500.

2. A, B and C jointly thought of engaging themselves in a business venture. It was agreed that A would invest Rs. 6500 for 6 months, B, Rs. 8400 for 5 months and C, Rs. 10,000 for 3 months. A wants to be the working member for which, he was to receive 5% of the profits. The profit earned was Rs. 7400. Calculate the share of B in the profit.

   **A.**  Rs. 1900     **B.**  Rs. 2660

   **C.**  Rs. 2800     **D.**  Rs. 2840

   **Answer:** Option **B**
   **Explanation:**
   For managing, A received = 5% of Rs. 7400 = Rs. 370.
   Balance = Rs. (7400 - 370) = Rs. 7030.
   Ratio of their investments = (6500 x 6) : (8400 x 5) : (10000 x 3)
   = 39000 : 42000 : 30000
   = 13 : 14 : 10
   ∴ B's share = Rs. $\left(7030 \times \dfrac{14}{37}\right)$ = Rs. 2660.

3. A, B and C enter into a partnership in the ratio $\dfrac{7}{2} : \dfrac{4}{3} : \dfrac{6}{5}$. After 4 months, A increases his share 50%. If the total profit at the end of one year be Rs. 21,600, then B's share in the profit is:

   **A.**  Rs. 2100     **B.**  Rs. 2400

   **C.**  Rs. 3600     **D.**  Rs. 4000

   **Answer:** Option **D**
   **Explanation:**
   Ratio of initial investments = $\left(\dfrac{7}{2} : \dfrac{4}{3} : \dfrac{6}{5}\right)$ = 105 : 40 : 36.
   Let the initial investments be 105$x$, 40$x$ and 36$x$.
   ∴ A : B : C = $\left(105x \times 4 + \dfrac{150}{100} \times 105x \times 8\right)$ : (40$x$ x 12) : (36$x$ x 12)
   = 1680$x$ : 480$x$ : 432$x$ = 35 : 10 : 9.
   Hence, B's share = Rs. $\left(21600 \times \dfrac{10}{54}\right)$ = Rs. 4000.

4. A, B, C subscribe Rs. 50,000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs. 35,000, A receives:

   **A.**  Rs. 8400     **B.**  Rs. 11,900

   **C.**  Rs. 13,600     **D.**  Rs. 14,700

   **Answer:** Option **D**
   **Explanation:**
   Let C = $x$.
   Then, B = $x$ + 5000 and A = $x$ + 5000 + 4000 = $x$ + 9000.
   So, $x + x + 5000 + x + 9000 = 50000$
   $\Rightarrow 3x = 36000$
   $\Rightarrow x = 12000$
   A : B : C = 21000 : 17000 : 12000 = 21 : 17 : 12.
   ∴ A's share = Rs. $\left(35000 \times \dfrac{21}{50}\right)$ = Rs. 14,700.

5. Three partners shared the profit in a business in the ratio 5 : 7 : 8. They had partnered for 14 months, 8 months and 7 months respectively. What was the ratio of their investments?

   **A.**  5 : 7 : 8     **B.**  20 : 49 : 64

   **C.**  38 : 28 : 21     **D.**  None of these

   **Answer:** Option **B**
   **Explanation:**
   Let their investments be Rs. $x$ for 14 months, Rs. $y$ for 8 months and Rs. $z$ for 7 months respectively.
   Then, 14$x$ : 8$y$ : 7$z$ = 5 : 7 : 8.
   Now, $\dfrac{14x}{8y} = \dfrac{5}{7}$ ⟺ 98$x$ = 40$y$ ⟺ $y = \dfrac{49}{20}x$
   And, $\dfrac{14x}{7z} = \dfrac{5}{8}$ ⟺ 112$x$ = 35$z$ ⟺ $z = \dfrac{112}{35}x = \dfrac{16}{5}x$.
   ∴ $x : y : z = x : \dfrac{49}{20}x : \dfrac{16}{5}x = 20 : 49 : 64$.

**Dr.R.Chinnaiyan, Professor /MCA-NHCE**

# Yukthi 2016

## A One Day National Level Student Technical Symposium, Organized by Department of MCA on 23rd April 2016-Reg.

The staff and students of Department of MCA organized a one day National level student technical symposium Yukthi 2016 on 23rd April 2016. The symposium was inaugurated by the chief guest Dr. Balaji Rajendran, Scientist C-DAC, Bangalore. The programme was started with lighting the lamp and invocation song by students. Dr. V. Ilango , Professor & Head of MCA extended a warm welcome to all the students and faculty members.  Dr. R. Chinnaiyan , the Convener of the symposium gave a brief note about Yukthi 2016. Dr. Manjunatha, Principal, NHCE had presided over the function and gave  the presidential address. In his presidential addrss, he expressed his views on our present academic system and Bloom's taxonomy. He extended his address by explaining the importance of application of knowledge and skills to real time problems with the various tools that they had studied during the course of study. He motivated all the participants to think out of their box. During the inaugural session, the e-copy and hard copy Proceedings     Yukthi 2016 proceedings was released by the Chief Guest and the first copy of the proceedings was received by the Principal.

The chief guest Dr. Balaji Rajendran expressed his views on past, present and future scenario in communications and artificial intelligence. He explained the IOT (Internet of Things) and SMTP protocol used in mail connection. He extended his technical talk by explaining the use of artificial intelligence in deepface and facebook. He concluded his speech by explaining the power of human brain which consists of about 200 billion of nerve cells.

Resource Person Mr. Dittin Andrews, Scientist C-DAC, Bangalore was presented a technical seminar on " Information and Cyber Security Education & Awareness " and also in Current trends in Critical Infrastructure Protection. He explained the use of current technologies in security and wireless devices. He extended his technical talk by explaining the concepts in cyber terrorism, stages in cyber attack and google hacking.

The second session started with paper presentation event in Falconry seminar Hall, NHCE. The session was arranged by faculty members and student coordinators. There were around 25 papers were presented by the students from various colleges and from NHCE. The symposium is ended with a Valedictory Function. Mr. Venkateswarlu , CEO, Vivilex Technologies Private Limited had given the valedictory address and distributed the prizes & certificates to the winners and the participants. The participants expressed their gratitude to the Department of MCA for giving an opportunity for presenting their research papers. They also thanked the faculty members and students of NHCE for their nice arrangements made. Finally Dr. R. Chinnaiyan, Convener of Yukthi 2016 showed his gratitude by vote of thanks to all who had directly and indirectly involved for the grant success of Yukthi 2016

Dept. of MCA: NHCE

# Reliability Modeling for Wireless Sensor Network

Abstract- Reliability is the one the major challenge faced by Wireless Sensor Network.  A packet or a message will be send by a sensor node to a sink node; packet will be passed through number of intermediate nodes. A message should not be successfully delivered to the sink node if the intermediate nodes are in dead state. In this paper we proposed a reliability model based on the energy factor and time delay factor of a node and it is also analyzed. By considering energy factor and time delay factor of each intermediate node route will be constructed from a sender node to the destination node. The proposed model not only determines the available route but also decide the most reliable route from source to destination without affecting the network performance.

time driven and other one is event driven. Time driven means the sensors every 30 minutes or 60 minutes (time will vary depends on the application) a sensor should monitor the environment and send a message to the sink node. Event driven means sensor will send a message to the sink node if there is any event occurred (Ex, habitat monitoring, disaster monitoring). For both type reliability is the important one. If the route is not available, message cannot be received by the sink node. In the Fig-1 n1 is a sender node sending message to sink node there are four intermediate nodes (n2, n3, n3, n5) and 4 routes. Sensor will communicate with each other and interchange the message by their energy. If the energy level is low it cannot able to send a message may go to the dead state due to low power unit. Another issue in WSN is time delay, energy is available in a sensor but the time taken to pass a message will be larger i.e. time delay. For event driven sensor time delay is a major issue. By considering these issues we propose a reliability model for a system which calculates energy consume and message delay for safety critical applications, introduces both the energy factor function and time factor function, and also establishes a reliability model of WSN based on a task.

R. Divya, 6th sem MCA

I Introduction

Wireless Sensor Network is platform for various application including military, health monitoring, habitat monitoring, entertainment. These applications are in urge of information and messages which are sensed by the sensors. Sensors in an environment will sense and send the information to the sink node then the end user can collect the data. In this paper we modeled reliability by finding the energy factor, time delay factor of a node.  Based on the factor, route will be constructed then messages will be interchanged between the nodes.
WSNs composed of multiple sensor nodes and one sink node. The sensor nodes are usually scattered in a sensor field as in Fig.1. Each of these scattered sensor nodes has the capabilities to collect data and route data back to the sink node. Data are routed back to the sink node by a multi-hop architecture through the sink node as shown in Fig.1.
A message or information may be discarded due to node failure or delivered time out manner to the sink node. Generally sensors will send message to the sink node in two manners, one is

'New Horizon Bytes' is for you and by you. Write-ups, photographs, illustrations and feedback are welcome from students and faculty of NHC-K, NHPUC, NHC-M, NHCE and NH B.Ed. Please make them brief (maximum 300 words) and e-mail to nhbytes@gmail.com