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**UDPSPHARMACON 2018**

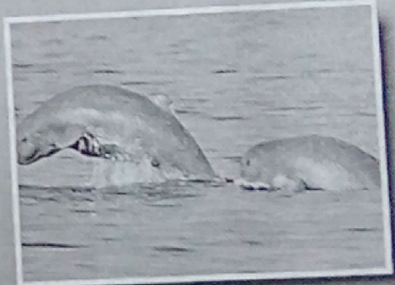
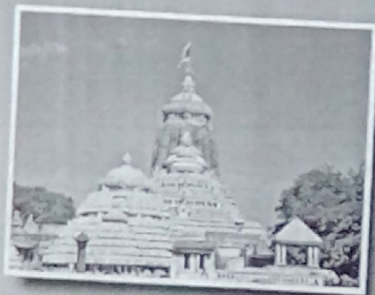
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## GLIMPSES OF ODISHA



# PHARMACON-2018

spectrophotometer from its tablet dosage form (40 mg strength). Solubility studies performed in different organic solvents keeping physiochemical properties of Olmesartan Medoxomil in view. The UV technique measures the absorbance at a particular wavelength i.e. 285 nm in dimethyl sulfoxide. Linearity, precision, and accuracy were in close agreement with pre determined acceptance criteria. Different concentration of analytical solutions were studied to get absorbance, the correlation coefficient value of 0.999, and slope line of  $Y=0.045x-0.018$  from its calibration curve proves its linearity. The % RSD value of method precision and intermediate precision are 0.2 and 0.5 respectively. Recovery studies were performed with placebo, the results obtained at three concentration levels varied from 99.0 to 101.3%. It is observed that the results are well in limits prescribed by International conference for Harmonization for validating analytical procedures. The proposed procedure which is inexpensive, simple and can be implemented for quantifying the cited drug from pharmaceutical preparation in routine quality control laboratories.

### Nanoscience and its application in treatment of cancer

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Nanoscience is an emerging trend and nanotechnology is a developing inter disciplinary technique which plays a vital role in treatment of cancer. Nanoscience influences cancer detection, diagnosis and treatment in a varied manner. It helps in delivery of drug to target area in good concentration by help of liposomal nano particles or micellar systems. The technique helps in obtaining better resolution of molecular imaging and diagnosis of cancer at early stages. Nanoparticles can be formulated in wide range delivery systems by simple modifications either in their size, shape or physical and chemical properties and can be utilized for targeted drug delivery approach. The nanoparticles developed can help in achieving specific receptor treatment approach, antibody mediated targeting, antiangiogenesis or passive targeting which are key methods in treatment of carcinoma. Thus, this science of drug delivery system development can help in overcoming quite a lot of limitations that are otherwise associated with conventional systems of carcinoma management.

### Current Status on Mouth dissolving Tablet

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Mouth Dissolving Drug Delivery System(MDDDS) are a new generation of formulations and for designing dosage form convenient to be manufactured ,administered, free from side effects , reducing the lag time and providing faster onset of action and enhances bioavailability so as to achieve better patients compliance. Mouth dissolving tablet(MDT) offers rapid disintegration and dissolve very fast in saliva and easily swallowed without need of water. MDT can be more effective in case of dysphasia, geriatric,paediatric where the problem of swallowing is common phenomenon. MDTs are known by various names such as "melt in mouth tablet , repimelts , porous tablet ; fast melting , fast dissolving , oral disintegrating or orodisperse ". For formulation of mouth dissolving tablet major excipient is super disintegration except that many other excipients are also used such that diluent, binders, glidants, lubricants, anti-adherents, flavouring agents, colorants, sweeteners etc. Some superdisintegrants are Croscarmellose sodium ,Crospovidone ,Indian 414. Various techniques are used for formulation of mouth dissolving tablet like Direct compression, Nanoionization, Lyophilization, Tablet moulding, Cotton candy process, Spray-drying, Sublimation, Mass-extrusion, Fast dissolving films etc. The procedures involving in the evaluation of MDT are wetting time and water absorption ratio, invitro dispersion time and uniformity of dispersion. Some marketed fast dissolving tablets are Nimesulide, Rofecoxib, Piroxicam, Rizatriptan, Peppermint flavour. The main aim of this review is to emphasis mainly on the advantage of fast dissolving tablet over conventional tablet, technique used to made Mouth Dissolving Delivery System(MDDDS) and which technique is suitable for particular dosage forms.

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**Abstract:** The present research work was aimed at determination of solution state and solid state stability of diclofenac potassium. Kinetic measurements were studied as a function of pH and temperature. The effect of pH on the degradation in solution state was studied through pH-rate profile of diclofenac at different pH such as 2.8, 4.0, 6.8 and 7.4. Micronized diclofenac was subjected at different temperature and humidity conditions (room temperature, 40°C/~75% RH, 30°C/~65% RH and 25°C/~60% RH) for determination of solid state stability of diclofenac. UV spectrophotometry method was employed for the kinetic study and degradation with respect to different pH and temperature conditions. Model fitting of both solution state and solid state stability data was performed to understand the underlying mechanism. It was evident from the study that both relative humidity and temperature had significant role to play in degradation of diclofenac.

### EVALUATION OF LAXATIVE ACTIVITY OF VARIOUS FRUIT EXTRACTS OF ANETHUM GRAVEOLENS L.

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**ABSTRACT:** *Anethum graveolens* an important medicinal plant and one of the most widely cultivated species of the family (Umbelliferae). It is highly valued from time immemorial because of its vast medicinal properties. The present work deals with the investigation of laxative activity of various extracts of *Anethum graveolens* fruits. The laxative effect was checked in using wister strain albino rats. All the crude extracts such as ethanol, ethyl acetate, n-butanol and petroleum ether at a dose of 200 & 400 mg/kg were tested for laxative activity, where as Agar-agar 300mg/kg, p.o. was used as standard drugs. Among all the extract, the petroleum ether extract was found to possess the most effective laxative activity. Therefore *Anethumgraveolens* fruits can be a substitute of synthetic laxative drugs having adverse effects. **Keywords:**; *Anethumgr aveolens* , laxative activity, Agar-agar, Albino rats.

### Role of Nanotechnology in management of Carcinogenesis.

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#### Abstract:

Cancer treatment has been a major challenge for medical science. Quite a lot of trials have been undertaken to develop more successful way of its treatment but every conventional system has got its own limitations. Though a lot of attempts have been taken in developing proper treatment majors yet the most common are chemotherapy, radiation and hormonal therapies. But these treatment procedures fail at specific points in delivering good therapeutic response basically because the traditional screenings techniques only help in cancer diagnosis usually at tissue level while cancer or carcinogenesis involves cellular, molecular, genetics properties of biological system resulting in uncontrolled cell division. Thus, demanding for development of better system of diagnosis, drug delivery to target areas in order to overcome problems of limited drug response, adverse effects, drug resistance etc. Last decade has seen a quite a lot number of developments being undertaken for application of nanotechnology and nano science for diagnosis, treatment and drug delivery to specific sites during management of cancer. Nanotechnology involves quite a lot of other scientific fields like physics, chemistry, biochemistry, and molecular biology utilizing which better tumour assessment can be undertaken. A varied type of nanoparticles (NPs) are