

PROVISIONAL ANSWER KEY

Question Paper Code:	25/2018/OL
Category Code:	199/2017
Exam:	Sr Lecturer in Radiodiagnosis NCA
Medium of Question:	English
Date of Test	03-05-2018
Department	Medical Education
Alphacode	A

Question1:-According to which Article, the executive power of the Union is vested in the President of India.

- A:-Article 64
- B:-Article 63
- C:-Article 52
- D:-Article 53

Correct Answer:- Option-D

Question2:-'To defend the country and render national service when called up on to do so' is a fundamental duty. Which is the Article ?

- A:-Article 51 A(d)
- B:-Article 51 A(b)
- C:-Article 51 A(c)
- D:-Article 51 A(e)

Correct Answer:- Option-A

Question3:-In which schedule of the Constitution deals with Union List, State List and Concurrent List ?

- A:-Tenth Schedule
- B:-Seventh Schedule
- C:-Sixth Schedule
- D:-Ninth Schedule

Correct Answer:- Option-B

Question4:-Which Article is related to Grama Sabha ?

- A:-Article 243 C
- B:-Article 243 B
- C:-Article 243 A
- D:-Article 243 D

Correct Answer:- Option-C

Question5:-Article 29 and 30 deals with

- A:-Right to Life and Liberty
- B:-Religious Freedom
- C:-Cultural and Educational Rights
- D:-Right against Exploitation

Correct Answer:- Option-C

Question6:-'Duty of the Union to protect States against external aggression and internal disturbance'. Which Article is related with this provision ?

- A:-Article 354
- B:-Article 355
- C:-Article 356
- D:-Article 357

Correct Answer:- Option-B

Question7:-'Mission Indradhanush' launched by the Govt. of India pertains to

- A:-New Education Policy
- B:-Construction of Smart Cities across the country
- C:-India's own search for the Earth like Planets in outer Planets
- D:-Immunization of children and pregnant women

Correct Answer:- Option-D

Question8:-Help Line 'Udyami' is meant for

- A:-Micro, small and medium enterprises
- B:-Large capital Industries
- C:-Female entrepreneurs
- D:-Farmers using Technology in Farming

Correct Answer:- Option-A

Question9:-Maximum age for joining Atal Pension Yojana is

- A:-60 years
- B:-50 years
- C:-40 years
- D:-70 years

Correct Answer:- Option-C

Question10:-Which State Govt. has launched Mahatma Gandhi Sarbat Vikas Yojana (MGSVY) for distressed Sections ?

- A:-Punjab
- B:-Karnataka
- C:-Meghalaya
- D:-Kerala

Correct Answer:- Option-A

Question11:-Sahodara Sangam was founded at

- A:-Kodugallur
- B:-Kottayam
- C:-Thrissur
- D:-Cherai

Correct Answer:- Option-D

Question12:-The Organisation called 'Samyuktha Rashtriya Samiti' was formed in connection with

- A:-Aikya Kerala Movement
- B:-Abstention Movement
- C:-Guruvayur Satyagraha
- D:-Vaikom Satyagraha

Correct Answer:- Option-B

Question13:-Who wrote the famous work 'Jathikummi' ?

- A:-Kelappan
- B:-EMS
- C:-Pandit Karuppan
- D:-O.N.V. Kurup

Correct Answer:- Option-C

Question14:-Arrange the following events in chronological order.

1. Temple Entry Proclamation
2. Vaikom Satyagraha
3. Shanar Agitation
4. Paliyam Satyagraha

- A:-(3, 2, 1, 4)
- B:-(4, 2, 3, 1)
- C:-(2, 4, 1, 3)
- D:-(1, 3, 4, 2)

Correct Answer:- Option-A

Question15:-Indicate the wrong pair among them.

- A:-E. M. Sankaran Namboothiripad - Onnekal kodi Malayalikal
- B:-V.T. Bhattathirippad - Kanneerum Kinavm
- C:-Vaghbhatananda - Abhinava Keralam
- D:-Vaikunda Swamikal - Darsanamala

Correct Answer:- Option-D

Question16:-Who among the following become the recipients of Padma Vibhushan in the year 2018 ?

- A:-Philipose Mar Chrysostom
- B:-Ghulam Mustafa Khan
- C:-Aravind Parikh
- D:-Mahendra Singh Dhoni

Correct Answer:- Option-B

Question17:-Shakespeare Beach is located in which country ?

- A:-France
- B:-Canada
- C:-Italy
- D:-England

Correct Answer:- Option-D

Question18:-The 2018 National Girl Child Day (NGCD) is celebrated on which date in India ?

A:-January 24

B:-January 25

C:-January 23

D:-January 26

Correct Answer:- Option-A

Question19:-Gadgil Committee Report and Kasturirangan Committee Report are related to

A:-Constitutional Reforms

B:-Protection of Western Ghats

C:-Ganga Action Plan

D:-Linking of Rivers

Correct Answer:- Option-B

Question20:-In which year, United Nations General Assembly voted to establish `2^(nd)` October as the International Day of Non-Violence ?

A:-2005

B:-2003

C:-2007

D:-2009

Correct Answer:- Option-C

Question21:-Compared with SE, GRE sequences use

A:-Longer TR and longer TE

B:-Shorter TR and long TE

C:-Longer TR and shorter TE

D:-Shorter TR and shorter TE

Correct Answer:- Option-D

Question22:-Echo planar imaging forms echoes using

A:-Successive 90-degree pulses

B:-Successive alternating 90-degree pulses

C:-Successive 180 degree pulses

D:-Successive alternating gradients

Correct Answer:- Option-D

Question23:-Lingula of lung is best seen in which X-ray view ?

A:-Lordotic

B:-Apical

C:-Left lateral decubitus

D:-Right lateral decubitus

Correct Answer:- Option-A

Question24:-Most signal in K space is present

A:-In the center

B:-In the periphery

C:-Along the frequency encoding axis

D:-Along gradient encoding axis

Correct Answer:- Option-A

Question25:-In order to decrease dose in large patients

A:-Decrease kV and improve image noise

B:-Increase kV and improve image noise

C:-Increase in KV and improve in contrast

D:-Decrease in KV and improve in contrast

Correct Answer:- Option-B

Question26:-Pneumonia alba is seen in

A:-Congenital TB

B:-Congenital malaria

C:-Neonatal HIV

D:-Congenital syphilis

Correct Answer:- Option-D

Question27:-The diagnosis of necrotizing enterocolitis is best made by

A:-Plain radiograph of abdomen

B:-Barium enema

C:-USG

D:-None of the above

Correct Answer:- Option-A

Question28:-Which of the following is false ?

- A:-Calcification is present in 10% with Wilms tumor
- B:-Calcification is present in 50% of neuroblastoma
- C:-Stage IV-S neuroblastoma has a very bad prognosis
- D:-Bilateral Wilms tumor is stage V tumor

Correct Answer:- Option-C

Question29:-The earliest radiologic sign of mitral stenosis is

- A:-Straightening of left border of cardiac silhouette
- B:-Upper lobe pulmonary veins are congested and prominent
- C:-"Inverted moustache sign"
- D:-kerley B lines

Correct Answer:- Option-B

Question30:-Pneumothorax is common with pneumonia caused by

- A:-Streptococcus
- B:-Pneumocystis carinii
- C:-Staphylococcus aureus
- D:-H. influenzae

Correct Answer:- Option-B

Question31:-In x-ray imaging, noise is determined by

- A:-Energy of x-rays hitting the detector
- B:-Number of x-rays hitting the detector
- C:-Tissue contrast
- D:-Amount of scatter hitting the detector

Correct Answer:- Option-B

Question32:-Which of the following numbers reported by the scanner best reflects the total amount of radiation delivered to the patient

- A:-Dose
- B:-CT Dose Index (CTDI)
- C:-Pitch
- D:-Dose-length product (DLP)

Correct Answer:- Option-D

Question33:-The following term refers to a measure designed to reflect stochastic (cancer) risk from radiation

- A:-Dose
- B:-CT Dose Index (CTDI)
- C:-Average dose
- D:-Effective dose

Correct Answer:- Option-D

Question34:-Automated exposure compensation uses the topogram (or scout) image to determine

- A:-Tube current (mA)
- B:-Pitch
- C:-Reconstruction filter
- D:-Bowtie filter

Correct Answer:- Option-A

Question35:-Iodine is a good CT contrast agent because

- A:-We can achieve very high concentrations in target organs
- B:-The k-edge (33 keV) is much lower than x-ray energies produced by a 120 kV tube
- C:-The k-edge (33 keV) is near the average diagnostic x-ray energy produced by a 120 kV tube
- D:-It simulates the attenuation of bone

Correct Answer:- Option-C

Question36:-First X ray sign in pulmonary thromboembolism

- A:-Wester mark sign
- B:-Palla sign
- C:-Fleischner sign
- D:-Knuckle sign

Correct Answer:- Option-A

Question37:-Atoll sign is seen

- A:-Tuberculosis
- B:-Cryptogenic organising pneumonia

C:-Aspergillosis

D:-Pneumocystis carini pneumonia

Correct Answer:- Option-B

Question38:-All the statements regarding shoulder radiography is true except

A:-In AP view with neutral rotation both greater and lesser tuberosities are super imposed

B:-In Grasheys projection there is more overlap of gleniod than AP projection

C:-AP oblique view rotate the body 35-45 degree

D:-In Y view humeral head should super impose over the base of Y if not dislocated

Correct Answer:- Option-B

Question39:-All are features of cardiomegaly except

A:-CTR > 50% in PA chest

B:-CTR > 60% in AP chest

C:-Cardiac diameter > 15.5 cm

D:-1.5 times increase in diameter in serial X rays

Correct Answer:- Option-A

Question40:-Most anterior ethmoid air cell is

A:-Haller cell

B:-Onodi cell

C:-Agger nasi cell

D:-Concha bullosa

Correct Answer:- Option-C

Question41:-Dentigerous cyst false statement is

A:-Seen in adolescent age

B:-Unilocularcyst

C:-Replaces tooth

D:-Seen in old age

Correct Answer:- Option-D

Question42:-In Film processing - fixing, all are true except

A:-Made of hypo/ammonium thiosulphate

B:-Preservative for developer and fixer is same

C:-Hardening agent harden and shrinks gelatin in the film emulsion to prevent its reduction

D:-Acidifier neutralizes alkaline developer

Correct Answer:- Option-C

Question43:-TLD false statement is

A:-Active radiation detection device

B:-Disc are made of calcium SO₄

C:-Lower filter is kept open

D:-Measures doses between 0.01-10.4 mGy

Correct Answer:- Option-A

Question44:-Regarding dark room false statement

A:-White/light colour paint on walls

B:-Lead equivalent of 2 mm in walls

C:-Ideal flooring with ceramic tile

D:-For safe light, bulb of 50 W is used

Correct Answer:- Option-D

Question45:-Fluid colour sign in USG seen in

A:-Pleural plaque

B:-Pleural effusion

C:-Hemangioma

D:-Lymphovenous malformation

Correct Answer:- Option-B

Question46:-In lateral view chest X ray

A:-Left hemidiaphragm lower than right

B:-Right hemidiaphragm lower than left

C:-Right dome is fully traceable

D:-Dome closer to film is lower

Correct Answer:- Option-A

Question47:-Lung volume is maintained in

A:-UIP

B:-NSIP

C:-NF1

D:-DIP

Correct Answer:- Option-C

Question48:-Patchy ground glass opacities with peripheral perivascular cyst seen in

A:-DIP

B:-RB ILD

C:-LIP

D:-NSIP

Correct Answer:- Option-C

Question49:-All are features of air space opacity except

A:-Air bronchogram

B:-Silhouette sign

C:-Preserved volume

D:-Reticular shadow

Correct Answer:- Option-D

Question50:-Regarding cystic adenomatoid malformation false statement is

A:-Spontaneous resolution can occur

B:-Type 3 is solid mass

C:-Type 2 shows uniform cyst of size < 2 cm

D:-Type 1 shows micro cyst

Correct Answer:- Option-D

Question51:-True in pneumothorax

A:-Sea shore sign

B:-Bar code sign

C:-Lung slide

D:-Prominent B pattern

Correct Answer:- Option-B

Question52:-KVP for high KV chest X RAY

A:-60

B:-90

C:-120

D:-150

Correct Answer:- Option-C

Question53:-Maximum permissible radiation in a pregnancy

A:-0.1 msv

B:-1 msv

C:-10 msv

D:-100 msv

Correct Answer:- Option-B

Question54:-Para pharyngeal space false statement

A:-Superior margin is skull base

B:-Inferior margin is C7 vertebra

C:-Contains fat and internal maxillary artery

D:-Located anterior to pre vertebral space

Correct Answer:- Option-B

Question55:-Left hilum is

A:-Higher level than right

B:-Lower level than right

C:-Denser than right

D:-Lucent than right

Correct Answer:- Option-A

Question56:-Carcinoid tumour of lung false statement

A:-Well defined hilar mass

B:-Eccentric calcification common

C:-Atypical carcinoids are hypovascular

D:-Typical carcinoids are hyper vascular

Correct Answer:- Option-C

Question57:-Small bowel true statement is

- A:-Presence of haustra
 - B:-Presence of Valvulae
 - C:-Presence of fecus
 - D:-Peripheral location
- Correct Answer:- Option-B

Question58:-Carcinoma rectum true is statement

- A:-T 2 Tumour extend beyond rectal wall
 - B:-Mesorectal fascia positive tumour are candidates for total mesorectal excision
 - C:-TRUS is the choice between T3 and T4 tumours
 - D:-Mesorectal fascia (MRF) involvement means tumour within 1 mm of MRF
- Correct Answer:- Option-D

Question59:-Beaded appearance seen in MRCP in all except

- A:-HIV cholangiopathy
 - B:-Metastasis
 - C:-Hilarcholangiocarcinoma
 - D:-Primary sclerosing cholangitis
- Correct Answer:- Option-C

Question60:-Treatment option for HCC with right branch of portal vein involvement

- A:-Surgery
- B:-RFA
- C:-TARE
- D:-TACE

Correct Answer:- Option-C

Question61:-BMFT contraindicated in

- A:-Large bowel obstruction
- B:-Small bowel obstruction
- C:-Ulcerative colitis
- D:-Crohns disease

Correct Answer:- Option-A

Question62:-Features of malignant gastric ulcer

- A:-Hamptons line
- B:-Extending outside the lumen
- C:-Smooth margin
- D:-Thick mucosal fold

Correct Answer:- Option-D

Question63:-All are true regarding paediatric liver lesions except

- A:-Hepatoblastoma may be associated with familial adenomatous polyposis
- B:-Hemangio endothelioma may show narrow infra renal aorta
- C:-Mesenchymal hemartoma may present antenatally as hydrops fetalis
- D:-Von meyenburg complex shows multiple moderate size liver cyst

Correct Answer:- Option-D

Question64:-Regarding chronic calcific pancreatitis true statement is

- A:-Pancreatic duct shows smooth dilatation
- B:-Chunky calcification in groove pancreatitis
- C:-Central luceny of calculus in hereditary pancreatitis
- D:-Duct penentrance sign is an indicator of inflammatory mass

Correct Answer:- Option-C

Question65:-Primary CNS vasculitis all are true statement except

- A:-Common in female
- B:-Calabresa's criteria for clinical diagnosis
- C:-DSA shows focal/diffuse narrowing of small vessels
- D:-Meningeal enhancement may be seen

Correct Answer:- Option-A

Question66:-True about dementia

- A:-Temporal lobe involvement seen in pre senile Alziemers disease
- B:-Temporal lobe involvement in CADASIL
- C:-Inferior frontal lobe involvement seen in strategic infarcts
- D:-Symmetric parietal atrophy in coticobasilar degeneration

Correct Answer:- Option-B

Question67:-True statement in CNS abscess

- A:-Diffusion restriction of wall in bacterial abscess
 - B:-Succinate peak in tuberculous abscess
 - C:-Diffusion restriction of center in fungal
 - D:-Diffusion restriction of wall in fungal
- Correct Answer:- Option-D

Question68:-Cather used for cerebral angiogram in case of bovine arch

- A:-Head hunter
- B:-Manis
- C:-Vertebral
- D:-JUDKINS

Correct Answer:- Option-B

Question69:-Diffusion restriction is seen in

- A:-Arachnoid cyst
- B:-Neuroglial cyst
- C:-Ependymal cyst
- D:-Epidermoid cyst

Correct Answer:- Option-D

Question70:-Spinal cord ependymoma false statement

- A:-More central
- B:-Hemorrhage is common
- C:-Eccentric location
- D:-More enhancing

Correct Answer:- Option-C

Question71:-Hyperostosis frontalis interna false statement is

- A:-Bilateral symmetric
- B:-Can involve parietal lobe
- C:-Inner table thickening
- D:-Inner and outer table thickening

Correct Answer:- Option-D

Question72:-Normal basal angle

- A:-125-145
- B:-100-125
- C:-90-115
- D:-150-175

Correct Answer:- Option-A

Question73:-Inner ear abnormality that can result in insult at 4th week of gestation

- A:-Michel deformity
- B:-Mondini deformity
- C:-Cochlear aplasia
- D:-Common cavity malformation

Correct Answer:- Option-C

Question74:-11-14 weeks scan

- A:-is done when CRL > 50 mm
- B:-is done when CRL > 45 mm
- C:-NT > 2 is abnormal
- D:-Done during fetal flexion

Correct Answer:- Option-B

Question75:-Indications for fetal echocardiography are except

- A:-Pre gestational diabetes
- B:-Diabetes diagnosed in first trimester
- C:-Paternal cardiac disease
- D:-Diabetes with HBA1C < 6%

Correct Answer:- Option-D

Question76:-In adenomyosis all are true except

- A:-Subendometrial cyst
- B:-Subendometrial echogenic nodule
- C:-Thickened transitional zone
- D:-Diverticula extending to endometrium is HSG

Correct Answer:- Option-D

Question77:-Septate uterus false statement is

- A:-Fundal contour may be normal
- B:-MRI is the modality of choice
- C:-Angle between cavity is $< 75\%$
- D:-Angle between cavity is $75-125\%$

Correct Answer:- Option-D

Question78:-Following refers to structural reporting system except

- A:-BIRAD-Breast
- B:-TIRADS-Thyroid
- C:-LIRADS-Lung
- D:-PIRADS-Prostate

Correct Answer:- Option-C

Question79:-All are true in prostate except

- A:-Citrate is increased in MRS in malignant tissue
- B:-Peripheral zone is hyper intense in T2 MRI
- C:-Peripheral zone is hyperechogenic in TRUS
- D:-Obliteration of recto prostatic angle is a sign of extra capsular extension

Correct Answer:- Option-A

Question80:-Erectile dysfunction false statement is

- A:-Angiography is gold standards for arterial impotence
- B:-Penile Doppler is done with intra cavernosal papaverine injection
- C:-PSV < 30 cm/s indicates arterial insufficiency
- D:-EDV <5 cm/s indicates venous insufficiency

Correct Answer:- Option-D

Question81:-Pro peritoneal fat plane is

- A:-Displaced in retroperitoneal lesion
- B:-Obliterated in retroperitoneal lesion
- C:-Unaffected in retroperitoneal lesion
- D:-Better visualised in retroperitoneal lesion

Correct Answer:- Option-A

Question82:-All are features of acute urinary obstruction except

- A:-Delayed dense nephrogram
- B:-Pyelotubular back flow
- C:-Moderate hydronephrosis
- D:-Modest renal enlargement

Correct Answer:- Option-C

Question83:-DWI can be negative in all except

- A:-Brain stem infarct
- B:-Corona radiate infarct
- C:-Deep grey matter nuclei infarct
- D:-When cerebral flow is in range of only electrical activity

Correct Answer:- Option-B

Question84:-First ventricle is

- A:-Right lateral ventricle
- B:-Left lateral ventricle
- C:-Foramen munro
- D:-Foramen lushka

Correct Answer:- Option-B

Question85:-Cobble stone appearance in MRI brain seen in all except

- A:-Walker Warburg syndrome
- B:-Fukayama dystrophy
- C:-Muscle eye brain disease
- D:-Rett syndrome

Correct Answer:- Option-D

Question86:-Relative percentage signal recovery (r PSR) is minimum for

- A:-Gliosarcoma
- B:-Epithelioidglioblastoma
- C:-Lymphoma

D:-Oligodendroglioma IDH mutant

Correct Answer:- Option-D

Question87:-One excluded in WHO 2016 brain tumor classification

A:-Glioblastoma

B:-Gliosarcoma

C:-Gemistocytic astrocytoma

D:-Protoplasmic astrocytoma

Correct Answer:- Option-D

Question88:-Inferior wall of third ventricle formed by all except

A:-Mammillary body

B:-Optic chiasm

C:-Tuber cinereum

D:-Habenuar commissure

Correct Answer:- Option-D

Question89:-T1 hyper intensity seen in all except

A:-Hyper acute blood

B:-Sub acute blood

C:-Melanin

D:-Fat

Correct Answer:- Option-A

Question90:-Temporal lobe cyst seen all except

A:-Aicardi syndrome

B:-Vander Knapp disease

C:-Congenital rubella

D:-Batten's disease

Correct Answer:- Option-D

Question91:-Tumoral calcinosis all are true except

A:-Associated with hypercalcemia

B:-More in blacks

C:-Central lucency may be seen

D:-Extensor aspect of joint

Correct Answer:- Option-A

Question92:-False statement about myositis ossificans

A:-Peripheral calcification

B:-Decrease in size with disease progression

C:-Edema in subacute phase

D:-Peripheral fat in MRI

Correct Answer:- Option-D

Question93:-All are seen in pyknodysostosis except

A:-Medullary sparing

B:-Mandibular changes

C:-Acro-osteolysis

D:-Hepatosplenomegaly

Correct Answer:- Option-D

Question94:-Features of Morquio disease except

A:-Platyspondyly

B:-Inferior vertebral body beaking

C:-Epiphyseal changes

D:-Oar shaped ribs

Correct Answer:- Option-B

Question95:-Caffey's syndrome is associated with

A:-Corner fracture

B:-Green stick fracture

C:-Loozers zone

D:-Epiphyseal fracture

Correct Answer:- Option-A

Question96:-Hamman's sign is seen in

A:-Hamman Rich syndrome

B:-Alpha 1 anti-trypsin deficiency

C:-Miliary TB

D:-Pneumomediastinum

Correct Answer:- Option-D

Question97:-Wormian bones are seen in all of the following except

A:-Some normal children

B:-Osteogenesis imperfecta

C:-Cleido cranial dysostosis

D:-Congenital rubella syndrome

Correct Answer:- Option-D

Question98:-Posterior iliac horns are seen in

A:-Pena Shokeir syndrome

B:-Crouzon syndrome

C:-Nail patella syndrome

D:-Pierre Robin syndrome

Correct Answer:- Option-C

Question99:-'Banana sign' in the fetal brain suggests

A:-Spina bifida

B:-Renal agenesis

C:-Encephalocoele

D:-Porencephaly

Correct Answer:- Option-A

Question100:-A metacarpal index of 8.4 is suggestive of

A:-Turner syndrome

B:-Noonan syndrome

C:-Klinefelter syndrome

D:-Marfan syndrome

Correct Answer:- Option-D